A PARAGRAPH

FROM

NASHVILLE'S HISTORY

THE FOSTER-CREIGHTON STORY

WILBUR F. CREIGHTON, JR.

FOR MY FRIEND JULIAN POWERS. A BROTHER MASON AND CRUISE COMPANION ON THE ROYAL VIKING SEA.

WITH BEST REGARDS TO YOU AND MRS. POWERS.

Gilbert T. Crichton

NOVEMBER 1974.

THE PARTHENON, Nashville, Tennessee

This Parthenon was first erected in plaster for the Tennessee Centennial, in 1897. Foster and Creighton built the stone foundation for it. Later they rebuilt the super structure in concrete as it stands today.

Because of their association with this building that typifies architectural beauty and enduring construction, the Parthenon has appropriately become the emblem of Foster and Creighton.

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Dedication

This book is dedicated to my dear friend, Dr. Alfred Leland Crabb, Professor Emeritus, of George Peabody College for Teachers, who encouraged me to write the Foster-Creighton story.

Foreword

A city, a state or a nation has throughout all time been remembered best by its historic landmarks--the finest creations of their distinguished architects and skilled builders--the Greeks by their Parthenon and stadia, the Romans by their highways and aqueducts which spanned their extensive empire.

This thesis is porperly developed in Wilbur Foster Creighton, Jr's proud story of the firm which he is honored to head, the Foster-Creighton Company. He has labeled his volume, "A Paragraph from Nashville's History." Actually, it covers much more than Nashville, in fact, Tennessee and a great part of these ever-growing, highly prosperous Southeastern states.

He pays fitting tribute to his ancestry, to the Creightons, father, grandfather and others, to Major Wilbur Foster, the great engineer who laid out the plans for much of the work done by Foster-Creighton in its earlier years. Much of the Louisville-Nashville Railroad into and around Nashville, and through Middle Tennessee, was put on the drawing boards by Major Foster, including the still-standing turntable bridge across the Cumberland between the Woodland and Jefferson Street bridges.

Mr. Creighton records his grandfather's connection with the Tennessee Centennial, which at the suggestion of the late Major E. C. Lewis, reproduced the classic Parthenon which is still the centerpiece of Centennial Park, lending beauty to the city and authenticity to Nashville's claim as the Athens of the South.

During that period, the Foster-Creighton Company constructed what is now Kirkland Hall, the administration building on the Vanderbilt campus,

Jubilee Hall at Fisk University, the Masonic Grand Lodge building, dormitory for Ward-Belmont, foundations for St. Thomas Hospital, structural steel work for the Hermitage Hotel, concrete work for the YMCA, which has just made way for the new Hyatt-Regency Hotel.

The Foster-Creighton Company built Ft. Nashborough on the Cumberland's banks, the Nashville River Terminal, locks and dams under the direction of the Corps of Engineers on the Cumberland, thousands of miles of highways from Memphis to Bristol and all over Tennessee and the South, bank buildings, including the old Fourth and First, the Nashville Trust Company and the beautiful new First American National Bank.

Mr. Creighton's company has built industrial plants for nitrate production at Sheffield, Alabama, ammunition plants, naval training stations, army camps for WW II, including Forrest at Tullahoma, and Brookley Field at Mobile.

It rebuilt the First Baptist Church in Nashville, it built the Cordell Hull Office Building for the State, numerous Federal structures here and throughout the South. It has handled sensitive constructions for the Atomic Energy Commission and the TVA.

In addition to this type of heavy work, Foster-Creighton constructed Brentwood Hall, an exact replica of The Hermitage, home of the late Rogers Caldwell; Hunter's Hill, the present home of Mr. and Mrs. Paul Mountcastle; and Longleat, the Tyne residence on Hillsboro Road.

He records his own justifiable pride in his distinguished professional heritage. His meticulous recording of the detailed activities of one of the great construction companies of this country proves his thesis and mine: that Nashville's history will bear through the years, high testimony

to the architects, engineers, the hardhats, the concrete mixers, the pick and shovel boys, the carpenters, bricklayers and stonemasons who have made Nashville, Tennessee and this part of the South more beautiful, more useful, more industrial and more profitable.

James G. Stahlman

THE FOSTER-CREIGHTON STORY

Wilbur F. Creighton, Jr.

It is my feeling that the history of General Contractors, or Constructors as they are now referred to, has for too long a time, been neglected by historians. In a large measure this is due to the fact that the constructors themselves have been so absorbed in the creative activities of their profession that they had neither time nor desire to compile records of their own achievements.

To a large extent, the builder has been the forgotten man of history. The great public structures which he has erected bear the name of the emperor, king, or politician who let the contract rather than the name of the man who actually constructed the project.

For this reason it is my purpose to record part of the history of Foster and Creighton Company and the Creighton family which has been identified with the construction industry for a century and a quarter.

EARLY FAMILY HISTORY

The first member of this family to live in Nashville was John Pankey who left Scotland with his family before 1800 and came directly to middle Tennessee where he bought a house in Gallatin. Family records do not disclose when he moved to Nashville, but when he died there in 1804 he owned 640 acres of land on the Red River in Robertson County as well as property in Gallatin and Nashville. One of his daughters, Isabelle, was eleven years old at the time of her father's

death.

It is not known where or when Isabelle met Robert Creighton, but when they were married in 1812 she was 19 and he was 21. Robert Thomas Creighton was the youngest son of a Scottish family who lived in Dumfries. Due to the Law of Entail, which provided that all of the family estate be inherited by the oldest son, Robert immigrated to America rather than depend on his older brother for a living and purchased a farm in Sumner County across the Cumberland River from the Hermitage, the home of Andrew Jackson. He probably selected this section of the county because several of his relatives had preceded him; court records indicate that Andrew Jackson represented the Creighton family soon after he began practicing law in Tennessee. Robert was an experienced horseman and for a time was associated with Andrew Jackson in racing and horse-breeding activities at the Clover Bottom Race Track.

Robert Creighton was fording Stones River in 1826 when his team was swept down stream. Cutting the team loose from the harness, he swam ashore to save the horses. This occurred during the coldest part of the winter, and, although he was a healthy young man, he contracted pneumonia as a result of this accident and died.

Andrew Donelson Creighton, the sixth child of Robert and Isabelle Creighton was born in 1826, shortly before his father died. He began his career as a builder in the early 1850's as an apprentice carpenter to one of Nashville's most experienced building contractors. He served his apprenticeship both in the carpentry shop and on the various buildings being constructed at that time. After four years he became a master craftsman and was listed as a carpenter in the first

Nashville City Directory of 1853.

This same year, George C. Creighton (probably a cousin) was employed as construction superintendent of the Tennessee State Capitol at a salary of $1000 per year. Four years after his employment, when the building was partially occupied, he pointed out to the commissioners in charge of the State Capitol that the cost of living had increased almost 100 percent during that time. His salary was raised to $1200 per year. It is also interesting to note that the rate for skilled labor at the Capitol building project ranged from $2.00 to $2.50 per day and from $1.00 to $1.25 for common labor. Owners of slaves were allowed $13.00 per month for their services plus food and clothing.[1]

The 1855 Nashville Directory lists A. D. Creighton as a member of the firm of Creighton and Long, Carpenters and Contractors. Within the next four years he formed a construction company with Mr. A. Lawrence, known as Creighton and Lawrence, which advertised that it was prepared to fill orders for building or repairing in the city or county at short notice and at fair prices. Nashville, at that time, had a population of 15,000 and was experiencing a building boom.

At the beginning of the Civil War A. D. Creighton was a member of the City Council; he left Nashville with the Confederate Army and was reelected to the Council in 1865. After the war he organized the firm of Ferguson and Creighton, Contractors and Builders. This firm operated a planing mill, manufacturing the items of millwork for use in the building which it had under contract.

[1] Victor H. Stromquist and Robert T. Quarles, Jr., Collection of "Capitol", or "Strickland", Papers, found during the remodeling of The Tennessee State Capitol., Tennessee State Library and Archives, 1957.

Andrew Creighton married Mary Pope, the daughter of William Pope, a large land owner in Robertson County. Their only son was born in 1855 and named for his grandfather, Robert Thomas Creighton. Robert was only seven years old when Nashville was occupied by the Federal forces after the fall of Fort Donelson, and at that time he was enrolled in Hynes School on Line Street near his home. This was the only grammar school in Nashville and was named for Colonel Andrew Hynes who gave the land for free school purposes. A few years after the war his father sent him to a private school at College Grove, Tennessee, 30 miles south of Nashville. The headmaster was a man of experience as an educator but could not maintain discipline in a student body composed mostly of young veterans of the Civil War. Following his experience at College Grove, Robert enrolled at Montgomery Bell Academy and signed the Register of Cadets of the Western Military Institute September 15, 1870. He was fifteen years old at the time.

Robert completed his first year at M. B. A. but did not enroll for the second year. His father's company had made a contract with the U. S. Government to furnish horse-watering troughs for the occupational forces, but when troops were withdrawn from Nashville the contract was cancelled and the company was left with a large quantity of special type lumber which it was forced to sell at a great loss.

WITH MAJOR WILBUR FOSTER

At seventeen, Robert Creighton was on his own to make a living. Fortunately, he was employed by Major Wilbur Foster as a rodman on engineering projects. As a railroad engineer, Major Foster had supervised construction of the first railroad bridge in Nashville, had

surveyed or supervised the building of all of the railroads leading into Nashville before the war, and had designed and supervised the construction of a new suspension bridge over the Cumberland River to replace the one the Confederates had destroyed in their retreat from Nashville in 1862. The map of Davidson County made by Major Foster in 1873 was so accurate that it was still in use in 1973. Although a native of Massachusetts, Wilbur Foster had enlisted in the Confederate Army and at the war's end was the ranking engineer officer in the Army of Tennessee with the rank of Major.

In April 1873, Major Foster was employed for one hundred dollars per month by the commissioners for building the State Capitol, to provide engineering services and supervise the completion of the masonry work, roads, walks, and landscaping of the State Capitol grounds.[2]

Mr. Samuel D. Morgan, president of the commissioners, was determined that the most modern design possible would be used for the completion of the project. The original design and plans for the landscaping had been made by William Pritchard only a few months before the Civil War started. The records show he received one hundred dollars due him for these preliminary drawings on March 5, 1861. It is interesting to note that Pritchard was also employed at a salary of one hundred dollars per month when the final landscaping work was started in 1873.

Mr. John Bogart, a prominent civil engineer and landscape

[2] Wilbur F. Creighton, Sr., The Life of Major Wilbur Fisk Foster: A Civil Engineer, Confederate Soldier, Builder, Churchman and Free Mason (Nashville, 1961), pp.27-28.

architect of New York, was employed in 1873 to prepare the plans for Capitol Hill landscaping. Bogart had prepared the initial plans for the landscaping of Central Park in New York City as well as other parks and state capitol grounds throughout the country.

A large quantity of rough stone blocks for the walls had been cut from the quarry near the State Penitentiary, which in 1873 was on the north side of Church Street, and were in piles around the Capitol building. The excavation had been completed but only a few of the dressed stones had been placed in the walls.

Since the Capitol had been used as a fort during the war, with trenches and gun emplacements cut into the sides of the hill, it was necessary for Major Foster to make a new contour map of the grounds before revised landscaping plans could be made. Robert Creighton's first duty on the job was to serve as a rodman for Major Foster. He carried a level rod and placed it where directed when the differences in the elevation of the ground were required, or he used a transit pole to mark points indicated by the Major sighting through the transit to measure directions. If, when measuring distances, he grew careless and did not pull hard enough to get the sag out of the tape, the Major would command, "Pull it, Bob. I can't push it."

After three years experience on the Capitol Hill job the Major decided to let Bob take over some of the surveying contracts. One of the first jobs undertaken by Bob on his own was the excavation and foundations for the first building, now Kirkland Hall, at Vanderbilt University.

The civil engineering activities of the Major and Bob increased as Nashville grew. In 1879, they made the original soundings, surveys

and estimates for the proposed Woodland Street Bridge across the Cumberland and also developed plans and specifications for the bridge masonry which were later used by contractors in preparing proposals for the work. Major Foster had accepted the office of City Engineer in 1865 with the understanding that he would be allowed to continue his private engineering practice, but the new City Charter, adopted in 1883, provided for the position of a full-time engineer. The Major did not wish to accept a post which would require him to give up his private practice. He did, however, agree to continue on a part-time basis until a successor was found. But on March 8, 1884, when the payment of his invoice for services was questioned, he tendered his immediate resignation and turned over to Robert Creighton all office records. Robert served as acting city engineer for ten months, until Edward Meade was appointed to fill the office.[3]

FOSTER AND CREIGHTON

In January 1885, Major Foster, Robert Creighton and J. W. Martin agreed to a partnership for the purpose of carrying on a general contracting business. The firm would be organized with a working capital of $1,500 and each partner was expected to invest $500. The third partner, J. W. Martin, chose not to enter the partnership and his share was bought out by the other two. When Robert was offered the opportunity to become a partner in the new firm he had no idea where he would get $500. By that time he was married to a very frugal wife who had taught school before they were married and had saved her

[3] Ibid., pp. 28-31; Foster's reasons for resigning are printed in Nashville Daily American, March 9, 1884.

salary. One night at supper Robert found the money under his dinner plate. This was the beginning of Foster and Creighton Company.

With a working capital of only $1,500 The Company continued to perform engineering services and confined its construction operations to small contracts, such as stone walls, curbs and gutters for new streets, foundations for residences, sewers and water lines. At that time architects let separate contracts for the various portions of a building.

In 1888, the company contracted with the Louisville and Nashville Railroad Company to build a spur track from Glasgow, Kentucky to Mammoth Cave. Since Foster and Creighton were experienced railroad engineers, the contract provided that they do the engineering as well as the construction work. This spur was twenty miles long, and it was a profitable contract. The following year the firm built a spur tract for the Nashville, Chattanooga and St. Louis Railroad Company in Sequatchie Valley, Tennessee. Major Foster remained in Nashville in charge of the engineering and quarrying operations, and Robert Creighton supervised the work in the field.

In 1891 Oscar Noel conceived the idea of building a flour mill on Elk River near Estill Springs, Tennessee. His plan was to operate the mill with water power by building a dam to raise the head and cutting a spillway through solid rock. Foster and Creighton received the contract to construct the dam. The idea was good but did not work because there was too little water in the river at low stages to furnish the necessary power. Noel was required to install a steam plant which was so expensive that the flour mill company went into bankruptcy. The Receiver in Bankruptcy advertised the mill for sale at auction

at Winchester, the county seat. A considerable amount of money was due Foster and Creighton for the work it had performed. Fearing that a bankrupt company sold at auction would not bring enough to pay their claim the Major and Robert, with gold in belts around their waists, attended the sale. They let it be known that they intended to bid at the auction. As this interferred with plans of the Receiver to buy the mill at a low figure, Foster and Creighton was paid in full.[4]

In 1893 the Legislature of Tennessee authorized construction of a new prison with the provision that total costs would not exceed $600,000. The general contract was awarded to J. P. Fulcher and Company, with William C. Smith as architect. Foster and Creighton was awarded a subcontract based on unit prices, for general excavation, grading, and stone masonry foundations and walls. This portion of the project progressed for more than a year and was almost complete when an investigating committee of the Legislature found the prime contract was in excess of the amount authorized in the bill. When the politicians made charges against both the architect and the general contractor, Foster and Creighton, although not involved in the controversy, removed its men and equipment and surrendered the contract.

The Tennessee State Centennial Exposition of 1897 was perhaps the greatest single undertaking of the Nashville community in its

[4] The city of Winchester built a larger dam and power plant on the Noel site, known as "The Loop Hydro Plant", which, probably, was the oldest hydroelectric power plant in Tennessee. A picture taken in 1909, when the original reservoir was drained shows two men standing on the dam: William Oscar Holt, operator of the plant, and Elmer Pate, superintendent for Foster and Creighton Company. "The Tennessee Valley Authority." System Control News. (Chattanooga, Tennessee, May 1, 1973).

history. The Nashville Board of Trade, fore-runner of the Nashville Area Chamber of Commerce, proposed the formation of an organization for this project with the following members of the executive committee: John W. Thomas, President; V. L. Kirkman, Vice-President; Eugene C. Lewis, Director General; W. P. Tanner, Treasurer; A. W. Wills, Commissioner General; Frank Goodman, Auditor. Colonel William C. Smith was proposed for the office of Director of Works but an unidentified employee of the Nashville Banner, not Major E. B. Stahlman, objected strenuously to the appointment of Colonel Smith and threatened to withdraw his support if Smith was appointed.

Major Foster was therefore selected for the office of Director of Works but agreed to serve for a limited time. Being 61 years old, he thought a younger man would be better qualified to do the job, and served only until most of the contracts had been let. On February 6, 1896, Major Foster resigned and his partner, Robert Creighton, was appointed "Chief Engineer." Robert Creighton built up an excellent staff with W. T. Rhea as his principal assistant. C. A. Asmus, an architect who had been educated in Germany, joined his staff. George Reyer, Superintendent of the City's Waterworks Department, was given a leave of absence so he could purchase, install and supervise the operation of the Mechanical Department; and J. M. Braid, an electrical engineer, was chief of the Electrical Department.

Major E. C. Lewis conceived the idea of reproducing an exact replica of the Greek Parthenon, as the principal building on the grounds.[5] Foster and Creighton was given a contract to build the foundation.

[5] Wilbur F. Creighton, Sr., The Parthenon in Nashville: Pearl of Tennessee Centennial Exposition (Nashville, 1968). p.21.

Colonel William C. Smith, a Nashville architect, prepared plans for the Parthenon, using drawings sent by the King of Greece. Thirty years later, Foster and Creighton Company had the contract to build the Parthenon in its present permanent form. The original concrete slabs supporting the side porticoes were left in place when the present building was built; they are probably the first reinforced structural concrete slabs built in Nashville.

After all of the Centennial buildings except The Parthenon had been sold, Major E. C. Lewis, Chairman of the Board of Park Commissioners, decided to remove two wooden bridges in Centennial Park and replace them with concrete. Foster and Creighton was selected to design and build the new structures, but since this was The Company's first experience with reinforced concrete bridges it did not have information for making accurate cost estimates. A preliminary estimate was made and the contract was based on the cost of the work plus fifteen percent for overhead and profit. A beam and slab design was made for the bridge near the 25th Avenue entrance; and a five-centered arch design was selected for the bridge at the west end of the lake. A mixture of one part cement, two and a half parts limestone dust, and five parts crushed stone was used in the concrete, which was mixed by hand and placed in the forms with wheelbarrows. Half-inch square bars were used for reinforcing. This was the company's first reinforced concrete bridge job--the bridges were probably the first built of concrete in the State of Tennessee. The cost of both bridges was less than the original estimated amount, and they were still in good condition in 1973 after sixty-six years of constant use. Wilbur Creighton, Sr., who had just graduated from

the Vanderbilt School of Engineering in 1904, was responsible for the design and construction of the bridges; and he was given a Civil Engineering Degree based on his thesis on the design of the arched bridge.

FOSTER & CREIGHTON COMPANY, INCORPORATED

The December 1906 meeting of Foster and Creighton directors was a significant turning point in the affairs of The Company. On motion, Major Wilbur F. Foster was elected Chairman of the meeting and Chauncey C. Foster, Major Foster's son-in-law was elected Secretary. Others attending the meeting were Robert T. Creighton, Robert M. Dudley and Charles H. Brandon. At this meeting the directors voted to apply to the State of Tennessee for a new charter of incorporation with the name of Foster and Creighton Company. The charter was issued by the State and the incorporators met on January 4, 1907.

Robert Creighton, under the instruction of Major Foster, had became one of the leading construction engineers and general contractors in the South. During the early years of his career he drove the first peg for the layout of Kirkland Hall on the Vanderbilt University Campus and drove the first nail at Fisk University for the construction of Jubilee Hall. At the time of his retirement in 1922 he could say that he had something to do with almost every building of importance in Nashville; and he had built or helped build every bridge spanning the Cumberland River except the Louisville and Nashville and the Tennessee Central railroad bridges. As chief engineer of the Tennessee Centennial Exposition he developed an interest in the city parks of Nashville, which he considered his major hobby. He was the guiding spirit of the city park commission for

thirteen years.

Robert M. Dudley, one of the charter members of "The Company," as we will now call Foster and Creighton Company, was the president of Gray and Dudley Hardware Company which was engaged in the wholesale trade on an international scale and was one of the largest and most substantial concerns of its kind in the United States. He had served as president of the National Hardware Association.[6]

Robert Creighton and Robert Dudley made an excellent team to direct the affairs of The Company. They were both devout Christians and officers in their respective churches. Both had come up the hard way in their different fields, and their formal education had been received in public schools and at Montgomery Bell Academy. Both were civic leaders in the Nashville community and each served as Chairman of the Board of Park Commissioners. They were thirty-second degree Scottish Rite Masons and members of the Kiwanis Club. Under the leadership of these two men, The Company experienced a tremendous growth in the years prior to the onset of the First World War.

On July 10, 1907, The Company submitted the lowest bid for the construction of the substructures and concrete approaches on the Jefferson Street and Shelby Street bridges, but due to the business depression of 1907, the committee appointed by the Davidson County Court was unable to sell the bonds issued for the purpose of financing the project. Robert Creighton, Robert Dudley and the other directors of The Company were determined to get the contract, and they offered

[6] Robert M. Dudley was Wilbur F. Creighton's father-in-law, and chairman of the Park Board which authorized the construction the present Parthenon in Nashville.

to buy the bonds for $800,000 with the provision that the contract be awarded to Foster and Creighton Company. The offer was accepted and the work began. Fortunately, The Company was able to sell the entire issue to a Cincinnati bond broker at a slightly higher price than it had paid.

FOSTER-CREIGHTON-GOULD COMPANY

On January 22, 1908, bids were received by the Davidson County Court for the fabrication and erection of the structural steel for the two bridges. Foster and Creighton Company, associated with the American Bridge Company as sub-contractor, submitted the lowest bid and was awarded the contract. The Gould Contracting Company of Louisville was sold a third interest in the contract to get the use of their organization, which was experienced in the erection of steel bridges.[7]

The Company also expanded its stone-quarrying operations with the purchase of limestone quarries at Rockwood, in north Alabama and at Carter's Creek, Tennessee, near Columbia. The Rockwood property covered an area of more than 2,000 acres; and in widely separated quarries The Company forces produced both cut stone for buildings and crushed stone for the iron furnaces of Birmingham.

Robert Creighton was vitally interested in the organization and development of these new quarries and planned to devote a large part of his time to this department of The Company. His son, R. W. Creighton, was placed in charge of the Rockwood, Alabama plant, and A. T. Bowers was sent to Carter's Creek. In order to follow this plan of operation

[7] Wilbur F. Creighton, Sr., Building of Nashville (Nashville, 1969), pp.83-92.

Robert Creighton proposed to the directors that The Company name be changed to "Foster-Creighton-Gould Company" and that Harry M. Gould be made Vice-President and General Manager of the Company.

Harry Gould assumed this office and wasted no time in building up the Bridge Department. Due principally to his energy and salesmanship, The Company was the successful bidder on numerous structural steel railroad bridges in the Southeastern States.

The largest contracts were the Kentucky and Indiana Railroad Company Bridge between Louisville and New Albany, Indiana; the Lewisburg and Northern Railroad Company Bridge at Shelby Park; the Louisville and Nashville Railroad Company bridges over the Apalachicola and the Chattahoochee rivers in Florida; The Asylum Avenue Viaduct in Knoxville; a bridge over the Arkansas River at Fort Smith; and the Central of Georgia Railroad Bridge near Savannah.

In addition to this large volume of bridge work The Company had the following building contracts in Nashville; building for the Grand Lodge of Tennessee on Seventh Avenue; a dormitory for Ward-Belmont College; paint shop for the Nashville Railway and Light Company; foundations for St. Thomas Hospital; structural steel for the Hermitage Hotel; and the concrete work for the YMCA building at Seventh and Union.

By the end of 1914 it became obvious to the directors that to continue operations with such a large volume of work it would be necessary to increase the staff of The Company. Mr. Gould recommended that this be done but other members of the board took a different view. Some of the bridge jobs had not been profitable. Mr. Gould proposed to sell his interest in The Company and buy back

enough equipment to reactivate the Gould Contracting Company. Wilbur Creighton, Sr., Vice-President and General Manager of The Company, bought Mr. Gould's stock, and the name was changed back to Foster and Creighton Company.

In 1913 the Nashville District, Corps of Engineers, advertised for bids to build Lock D on the Cumberland River in Stewart County, two miles below Dover, Tennessee. No responsive bids were received, and the contract was negotiated with Foster and Creighton Company. This was the first concrete Lock built on the Cumberland River and was the first contract for a complete project awarded by the Nashville District Office to one General Contractor.

Major Harry Burgess, Nashville District Engineer, made the following comments in 1916 on the construction of Lock D:

> "As no satisfactory formal bids were received for the construction of Lock "D", provision was made for this work by the acceptance of an informal bid from a local contracting company of high standing. This company had just completed the construction of two large bridges over the Cumberland River at Nashville and it was prepared to begin operations at Lock D without delay."

Since there were no private companies which could supply the sand and gravel, the first problem to solve was to build a bridge and a fleet of barges. This was done and The Company bought two stern wheel towboats, 60 feet long and 20 feet wide, which were placed under the command of Tom R. Taggart, a licenced pilot and the former owner of one of the boats. The roads in Stewart County were primitive; there were no automobiles in the county, and the nearest rail connection was the end of a spur of the Louisville and Nashville Railroad at Bear Springs, 6 miles from the job. This spur

was extended to the river bank in order for the cement and other material to be loaded on The Company barges.[8]

All sand and gravel for the concrete was dredged from bars near the jobsite. The contract required the contractor to furnish three boxes containing one cubic foot samples of the sand and gravel to be used. From past experience, Wilbur Creighton, Construction Superintendent, knew the importance of samples to be furnished on government work, and, when the boxes were filled in the presence of the Corps Resident Engineer, he added a handful of twigs and other trash to each box. He knew that such refuse was in the gravel bars, and with the equipment then in use there was no way to wash it out. The material furnished all summer was perfect, but when a rise in the river caused the dredge to be moved to another bar, the first six barges contained twigs and trash. The Corps engineer condemned them. His attention was called to the approved samples, which contained a handful of twigs to each cubic foot. The engineer had one entire barge sifted by hand, finally admitted the quantity of objectionable material was in about the same proportion as the samples, and approved the material for use.

Lock D was completed on schedule and opened to river traffic, December 21, 1916. In the Professional Memoirs, a national engineering journal, Major Harry Burgess, Nashville District Engineer,

[8] The first automobile in Dover was a T-Model Ford, which arrived by steamboat while The Company was building Lock "D" in 1914. The local blacksmith uncrated it, filled the tank with gasoline and pulled it out into the street. Wilbur Creighton, who owned a "Hupmobile", was asked to drive the car but when he looked at the three pedals on the floor board and did not see a gear shift lever, he was completely baffled and had to admit defeat. His friends in Dover refused to believe that he owned a car in Nashville.

noted that the work at Locks B, C, and D could have been completed in three seasons and bemoaned the fact that the contract was let for four seasons. As a result, he said, little work was done the first season and delays were forced when high water prevented work in the later seasons. But he said:

> At Lock D, under similar conditions as to time allowance, the contractor actually pushed his work at a rate which was quite satisfactory. With contractors having this degree of energy and foresight, there would be no objection to allowing in the specifications an extra year of time for the work, but specifications are intended for an average contractor.

EARLY BUILDING CONTRACTS IN NASHVILLE

After the completion of Lock D, The Company was the successful bidder on three building jobs in Nashville: The Fourth and First National Bank Building (now the First American National Bank), Library building for Peabody College, and the Ford Garage (now the Hippodrome Oldsmobile Garage).

The Fourth and First Bank job was the largest building contract undertaken by The Company up to that time.[9] A unique method was used

[9] In 1915, James E. Caldwell, President of the Fourth and First National Bank, commissioned Ludlow and Peabody, prominent New York architects, to design and supervise construction of the bank's new building. Mr. Caldwell was a very frugal man and he thought the old building on the site might be remodeled and used for the bank. His plan was found to be impractical and the architect proceeded to design a new building with an arched ceiling for the banking room, supported by a row of columns in the center of the banking room. Mr. Caldwell did not approve this plan. He told the architect he could visualize a bandit, standing behind one of the columns, picking off the bank employees with a Winchester rifle. He was reported to have said, jokingly, that if there was any stealing to be done in this bank, he would do it himself. The row of columns was eliminated and the upper floors, over the banking room, were supported by concrete beams, two and one half feet wide, eight feet deep and fifty-two feet long. Henry C. Hibbs was the architect's representative on the project and John Howard Clark, a prominent Nashville architect, worked on the drawings in Ludlow and Peabody's office soon after his graduation from architectural school.

in wrecking the old building on the site and construction the new structure. A tower sixteen-feet square was built of long poles in the middle of the building, with two derrick booms attached at opposite corners. It was firmly anchored at the bottom and secured by cables on the outside. The two booms were used to remove the old material and to place concrete in the new structure. This same principle was used by The Company for placing the concrete in the upper floors of the new First American National Bank Building at the same site in 1973.

The Company fortunately completed all three of these jobs before American involvement in World War I, for when the DuPont Powder Plant started, all other construction work in Nashville was forced to a stop because of labor and material shortages

Shortly after the war began in 1917, the Government decided to build an Air Nitrate Plant at Sheffield, Alabama. The purpose was to extract nitrogen from the air, by a process which required a large quantity of high grade limestone. The American Cyanamid Company was to operate the plant, and it decided to obtain this stone from The Company quarry and Crusher Plant at Rockwood, Alabama. R. T. Creighton and an official of the American Cyanamid Company signed an agreement for the Government to take over the Rockwood Plant.

The Quartermaster Corps began operations by building houses and importing Mexican laborers, but in two years the Quartermasters never produced as much stone as had been produced prior to the take-over and the cost was six times higher. At the end of the war, when the plant was returned to the Company, the equipment was in a rundown condition and the employees were completely demoralized. To re-

imburse The Company for the use of the plant the Government placed an order for 125,000 tons of crushed stone at a price which included the cost of repairing the equipment but no profit. This affair with the Government was a very unfortunate and costly experience for Foster and Creighton Company.

During the war all contractors who did not have Government contracts suffered great losses and Foster and Creighton Company was no exception. There were no construction contracts on the books, but the stone quarries at Carter's Creek and Rockwood were in full operation and produced enough income to keep the organization going.

WILBUR F. CREIGHTON SENIOR, PRESIDENT

On February 2, 1920, the stockholders and directors of The Company met in their office on the top floor of the Fourth and First National Bank Building, and the following officers and directors were elected: Wilbur F. Creighton, Senior, President and General Manager; Edwin Warner, Vice-President; Andrew D. Creighton, Secretary-Treasurer. The Directors were: Robert T. Creighton, Chairman of the Board; Wilbur F. Creighton, Senior; Robert M. Dudley; Edwin Warner; and James Dunbar, Junior. Adrian D. Eatherly was appointed Chief Estimator of The Company assisted by Joseph Dentici.

The Board decided at this meeting to change Company operations from heavy engineering construction to architectural building work, which was less hazardous and required less investment in equipment. This was a wise decision because the construction program of the United States was reported to be from 12 to 15 billion dollars behind; and since no private jobs had been initiated in Nashville during the war, the prospects were bright for building construction.

Within the next three years The Company negotiated contracts with the National Life and Accident Insurance Company for its building at Seventh and Union, with the Victor Chemical Works for its plant on Centennial Boulevard, and with the Nashville Trust Company (now Nashville City Bank & Trust Company) for a building at 315 Union Street.

Wilbur Creighton, Sr., and William Nelson, President of the Nashville Trust Company, were returning from a Kiwanis Club meeting when Mr. Nelson pointed to a lot on Union Street across the alley from Mitchell's Candy Store and said, "I want to build a building on that lot." Wilbur replied, "All right, we will start to work in the morning." "Go ahead," Nelson ordered. That was the only contract ever made. Asmus and Clark, architects, started work on the plans, and The Company started wrecking the old building and excavating for the foundations and basement. Mr. Paul Davis, President of the American National Bank, decided to add eleven stories to his existing bank building at Third and Union; and the contract was given to Hegeman and Harris, a large New York contractor. The construcion of both buildings started at the same time.

Soon after The Company had wrecked the old building and commenced building the foundations, Mr. Nelson told Wilbur Creighton that in order to get tenants the building must be completed by the first of January 1926, eleven months from that date. Wilbur told Mr. Nelson that he would make him a sporting proposition. The Company would give him $10,000 if the building was not complete on the first of January, and he would give The Company $10,000 if it completed the job before that date. Mr. Nelson said he would do better than that, he would add $15,000 to the fee if the job were completed by the first of the year

and deduct $10,000 if it was not finished on or before that date.

The Nashville Trust Building and the American National Building, side by side, were the same height, but the Nashville Trust Building was almost twice as large in area. Naturally the floor elevations were not the same.

Both buildings progressed at a rapid pace, but Foster and Creighton was the first to fly the American flag on the last steel beam in the roof, indicating completion of the structural steel. Both buildings were completed before New Years Day, 1926, and The Company collected the bonus.

During the 1920's The Company built up a large volume of work as a result of competitive bidding. In Birmingham, where construction was booming, it built the Birmingham Public Library, East Lake Orphanage, Henley Building, Birmingham National Garage, Thomas Jefferson Hotel, Protective Life Insurance Company Building, and Birmingham Municipal Stadium (now Legion Field).

The Company also built the Chattanooga Savings Bank Building on Main Street in Chattanooga. In Nashville it had the following contracts: The first WSM Radio Broadcasting Station for John H. Dewitt, Jr. of the National Life and Accident Insurance Company at 1200 Villa Place; foundations for the two 165 foot high towers which were erected by the Nashville Bridge Company; and the restoration of the Parthenon in Centennial Park.

Other Nashville projects included Jarman Shoe Company (now Genesco) Plant, Tennessee State Highway Garage on Charlotte Avenue, Cheek Garage (now Cumberland Motor Company) at Sixteenth and Broad, River and Rail Terminal (now Ozburn-Hessey Company) at First and

Broad; Neuhoff Packing Company Plant, Federal Reserve Bank at 226 Third Avenue, Neely Auditorium and Alumni Memorial Hall at Vanderbilt, Bennie Dillon Building at Seventh and Church, Life and Casualty Insurance Company Building at Fourth and Church, The Caldwell and Company Building (now Commerce Union Bank) at Fourth and Union, and Brentwood Hall (now The Ellington Agricultural Center), a palatial mansion for Rogers Caldwell on Hogan Lane between Franklin and Edmondson Pikes.

Brentwood Hall was an interesting project. Rogers Caldwell, with the backing of his father, James E. Caldwell, had started Caldwell and Company, which by 1929 was the South's largest investment house and one of the largest in the country. At the peak of operations, it controlled assets of more than a half billion dollars, and it was reported that its telephone bill was in excess of $50,000 per month. The Caldwell firm pioneered the sale of southern bonds to eastern investors.

Rogers Caldwell decided to build a Colonial mansion on his 207-acre farm which would be one of the most strikingly beautiful country homes in Middle Tennessee. He wanted Brentwood Hall to be an exact duplicate of The Hermitage, the home of Andrew Jackson. Two architectural firms were selected to prepare the plans: Marr and Holman of Nashville, and Thompson, Holmes and Converse of New York. Foster and Creighton Company was selected as the General Contractor.

In addition to the main building, the contract included a small brick chapel which was of classic design and a true copy of a Greek Temple, caretaker and servants quarters, and a barn equal to those found around Lexington, Kentucky.

There was only one major difference in the design of Brentwood Hall and the Hermitage. Brentwood Hall had two baths added on each of the one-story side wings, adjacent to the ends of the two-story center section. The Hall was built at a time when the most skilled craftsmen who took great pride in their work were available. The spiral stair in the central hall was built without nails, the joints pegged, mitered and glued in such a manner that the frame of the stair was supported by the heavy brick circular stairwell. Jim Anglea and his brothers, Lunn and Bill of Humbrecht Langlois and Johnson, were spiral stair specialists and took great pride in building the one in Brentwood Hall.

After the Caldwells moved into the Hall, Wilbur Creighton, Jr. was put in charge of the final grading and landscape work. One morning Mrs. Caldwell told him she wanted one of the trees near the house dug up and planted beside the entrance driveway. The crew was completing the job late in the afternoon when Rogers Caldwell came up the drive. He stopped the car and demanded to know who had ordered the tree moved, and was informed Mrs. Caldwell had given the order. In no uncertain terms, the crew was ordered to replant the tree in its original spot and the following evening the tree was back in its original hole.

Among the homes built by Foster and Creighton were Hunters' Hill (now the Paul Montcastle Home) for Guilford Dudley, Senior,--with Daugherty and Gardner as the architects; the Tom Tyne residence on Hillsboro Road with Bryant Fleming as architect; and, on the next hill south on Hillsboro, the R. E. Martin residence (now owned by Guy Wallace, Jr.) where Warfield and Keeble were the architects; and a home

for Dempsey Weaver (now The Colemere Club) on the Murfreesboro Road where Hart Freeland and Roberts were the architects.

The story is told that a newly rich matron, desiring to have something different in her home, spent a great deal of time and money in Europe buying old mantles, doors, frames, hardware and other items from antique dealers in England, Spain, and Italy; and when the furnishings arrived in New York, the Custom Officer judged them not to be old and charged the usual duties. The lady was so sure they were antiques that she had them shipped to Nashville, where she persuaded a complacent inspector to declare them antiques and charge the increased duties. When the items arrived on the job, the mantles had been cut with a circular electric saw and the door frame joints had been fabricated with ring connectors. Needless to say, they did not fit the openings.

The Rockwood Alabama Quarries and Mills, including 2300 acres of land, was sold in 1925 after the death of Robert Creighton, in order to make an equal distribution of his estate among his five children. A. D. Creighton organized the Nashville Stone Setting Company and the Russellville Alabama Cut Stone Company in 1928. They were not connected with Foster and Creighton Company.

About 1925 the Sloss-Sheffield Coal and Iron Company of Birmingham, Alabama had accumulated a large quantity of slag from its blast furnaces which was piled on very expensive property near the heart of the city. Someone came up with the idea that this material, when crushed, could be used as a coarse aggregate for concrete, and, as a result, the first ready-mixed concrete plant in the South was built.

The idea of ready-mixed concrete was so interesting to Wilbur Creighton, Jr., that he determined to study the subject in detail during his last two years at Vanderbilt. Fortunately one of his professors in the engineering school was also interested in the subject, and Foster and Creighton Company made plans for starting a ready-mix concrete plant.

The Company had contracts in 1929 for the Stumb Garage at Eleventh and Broad and the Seventh Avenue Garage South of Church Street in Nashville. Plans were developed to mix the concrete at the W. T. Hardison Sand and Gravel Company Plant and haul it to both jobs. The experiment was a success, and the Nashville Ready Mix Concrete Company was organized with Foster and Creighton Company retaining twenty percent of the stock.

The Company had a hard time promoting the use of Ready Mixed Concrete, because the average person did not realize that it would set up so fast. When one housewife ordered a batch of concrete for her driveway, Tom Bowers, manager of the Ready-Mix Company, went out in advance to see her about it. He asked her where she planned to use it. She said, "Just dump it out on the driveway; my yard man will be here tomorrow to spread it out."

The use of ready-mixed concrete eventually became common, but in the early 1930's most contractors in Nashville still used job mixed concrete. This method required more labor, and the relative amounts of cement and aggregated could not be accurately measured. Foster and Creighton Company had a decided advantage over its competition because of its Ready Mix Plant, and received most of the jobs awarded in Nashville during the 1930's. Among them were: the first Nashville

Filtration Plant on Pumping Station Road; replica of Fort Nashborough on First Avenue; General Hospital Nurse's Dormitory on Hermitage Avenue; Victor Chemical Works Laboratory Building on Centennial Boulevard; City Market House (now Metropolitan Safety Building) on the Square; Cumberland River Sand Company Office Building (now Ingram Materials Inc.) on Fatherland Street; concrete work for the U. S. Post Office, 901 Broadway; Vanderbilt University Hospital; First West Wing Addition; and Cheatham Place Housing Project, Eighth Avenue North and Clay.

The Company had three remodeling contracts in the 1930's which were very important because they came at a time when The Company was beginning to recover from the depression; competition was severe and there was very little building work in Nashville.

The first of these remodeling projects was the restoration of the First Baptist Church after a devastating fire on February 3, 1934, had completely destroyed the Sunday School portion and considerably damaged the roof over the auditorium.[10] Before the fire had been completely put out, Mr. Frank Jarman, President of the General Shoe Company and a pillar in the Church, asked Wilbur Creighton, Jr. to meet him, Doctor Powell, the Pastor, and the insurance adjustor at the building. Within a few hours, an estimate of the damage was completed and accepted by the insurance company; and on February 10th Foster and Creighton was given a cost-plus contract to proceed with the work. While the architects, Hart, Freeland and Roberts, were preparing the plans, replacing the roof over the auditorium and

[10] Loren R. Williams, "First Baptist Church," Seven Early Churches of Nashville (Nashville, Elder's Bookstore, 1972), p. 72.

building temporary protection for the organ commenced.

The Church tower had not been seriously damaged, but the loose slate remaining on the undamaged portion of the main roof created a serious hazard and was removed. Foster and Creighton was able to protect the organ and completely reroof the auditorium before a drop of rain fell on the building. The amount included in the estimate for water damage to the pews, cherry wood beans, and paneling was thereby saved. Within five months, services were held in the auditorium, and one month later the job was complete. The total cost of the work was $1,500 less than the $50,000 collected from the insurance company, and a third floor had been added to the Sunday School portion.

The second important remodeling job was a contract with the U. S. Government for remodeling the old Federal Office Building at the corner of Seventh and Broad, across the street from the First Baptist Church. This gothic style building, originally called The Custom House, was truly one of Nashville's landmark buildings. It was the first Federal Public Building built in Nashville; and when President Rutherford B. Hayes laid the cornerstone on September 19, 1877, in an impressive ceremony, Nashville had reached a turning point in its recovery from the effects of Civil War.[11]

In 1935 Foster and Creighton received a contract for rebuilding the Bedford County Court House in Shelbyville, Tennessee, which had been destroyed by fire. Marr and Holman, architects, gave The Company the

[11] Lawson B. Knott, Jr., "Federal Office Building, Nashville, Tennessee, Historical Notes," (Washington, D.C. 1965); and an account of President Rutherford B. Hayes laying the Cornerstone at the Nashville Customhouse, Nashville Daily American, September 20, 1877. Mr. Knott was acting administrator of the General Services Administration when he presented this report to Wilbur Foster Creighton.

option of tearing down the remaining brick walls and replacing them with new brick, or leaving them in place and adding the sections which had been damaged by the fire.

The brick in the two-foot thick walls had been hand made, and to match them with new brick would have been very costly. The Company elected to brace the old walls with cables anchored to the concrete floor slabs until the damaged sections had been rebuilt. A sufficient quantity of old brick was salvaged for use in the face of the restored wall sections to match the walls which had remained in place. The rebuilt building looked the same as the original on the outside; and it was a fireproof concrete structure with steel roof framing, terrazzo floors and steel stairs instead of wood.[12]

In September 1932, The Company took a contract with the Tennessee State Highway Department to build a bridge over the Hatchie River be-between Tipton and Lauderdale Counties in West Tennessee. The overall length of the bridge was 4200 feet, including 138 deck-girder spans and one 80-foot steel span in the center. Funds for the project were supplied under the Emergency Relief Act, which required the work to be completed in 150 working days--the shortest time ever allowed in Tennessee for a job of this size. The Hatchie River at low water level was only about 150 feet wide, but an ordinary rain caused it to rise rapidly, and when out of its banks in spread over a bottom a mile wide. Even while within its banks, water flowed in many sloughs parallel to the river. This surface condition at the job site made the use of roads through the bottom impractical, so a

[12] Richard Samuel Reynolds, The Engineer Reports: Memoirs. (Nashville, 1972), pp. 150-52.

temporary double-track railway trestle was built parallel to the bridge. It extended from the concrete plant on a low bluff on the south end to the other end of the bridge. All materials for the job were hauled over this trestle with two five-ton gasoline locomotives.

In order to build the falsework and place concrete for the decks, The Company used two traveling derricks on top of the pile caps: one for erecting falsework and one for placing concrete in the decks. Five stiff leg derricks were used to drive piles and build the river piers. The cypress trees on the site were cut; and with a rented sawmill all the material for the trestle was made. As Chief Engineer, Wilbur Creighton, Jr., had the responsibility for the design of the forms, falsework, trestle, concrete plant, and the stiff leg derricks built on the job.

In order to use as many men as possible, all men below the rank of foreman were allowed to work only 30 hours per week. The pay scale was very low; and few experienced operators for the steam and gasoline hoisting machines could be employed. Most operators were trained on the job.

When the time came to pour the first concrete span, the river came up over the trestle, forcing a halt to work. This was a very gloomy period, because the banks had declared a moratorium and the bank in Covington which held Company funds would not issue script. During the time the banks were closed The Company stocked its job commissary with food and printed credit books of different denominations. In order to meet the payroll, a credit book was placed in each pay envelope. To cap it all off, Cecil Robertson, the project superintendent, was seriously injured at his home in Nashville, and Wilbur

Creighton, Jr., was put in charge of the job.

The Hatchie finally receded and work resumed. The method of placing concrete in the bridge decks with the travelling derricks proved successful and good results were also obtained on the river piers. When the final time was computed, the State charged The Company with 149½ working days, just a half working day less than the number called for in the contract.

Another interesting Company contract, completed in 1937, was a floodwall at Hickman, Kentucky. The Company completed this project shortly before the great 1937 Mississippi River flood; and The Company was pleased to receive a letter from the Hickman Chamber of Commerce expressing thanks for saving their city. Performance of this contract was administered by Captain James B. Newman, Junior, Acting Memphis District Engineer. He was the father of Colonel James Newman, III, who was the Nashville District Engineer twenty-seven years later when The Company built the Barkley Canal Bridge at Grand Rivers, Tennessee.

WORLD WAR II

During the summer of 1940, the Germans were marching at will through eastern Europe, and the people of the United States were getting panicky as they realized how unprepared the nation was for total war. The Selective Service Act was passed September 16, 1940 and the President promised to build camps with all the comforts of home. The U. S. Quartermaster Corps was directed to award contracts and supervise construction of 42 cantonments distributed over the entire country.

Complying with advertised requests of the Army, Foster and Creighton

sent the Construction Advisory Committee in Washington complete information on The Company, including the latest financial statement, a list of equipment owned, its cost and condition, names of the company's personnel and experience, and pictures of outstanding jobs which had been completed within the previous ten years. The Company also furnished letters of commendation from owners and a letter of recommendation from its banker with an agreement to lend the funds needed to finance projects.

Don and Wilbur Creighton, Sr. were called to Washington for an interview with the Construction Advisory Board; and within three days Foster and Creighton was asked if it would be willing to team up with The Hardaway Contracting Company of Columbus, Georgia, to form a joint venture to build Camp Peay, later Camp Forrest, near Tullahoma, Tennessee. The Company agreed, and the next day, with the Quartermaster Corps--the second contract awarded in the nation for cantonments.[13]

This form of contract, authorized by the 76th Congress on July 2, 1940, provided that the work at Camp Peay consisted of building the "Cantonment," including necessary building, temporary structures, utilities and appurtenances thereto at an estimated cost of $8,379,510

[13] The two companies had been engaged in the construction business for a long period of time and both had become very independent in their operations; therefore the need for complete harmony in the new organization was recognized by the co-venturers. In order to avoid any possible disunity, the leaders of both companies mutually agreed that they would not offer a job to any of the other's key men, after completion of the job. This pact was kept and the organization operated smoothly during the prosecution of the contract.

Foster and Creighton Company has always recognized the importance of having harmony in its organization. The motto of The Company is:

"Adversus Discordias Nos Pugnamus;"
"We Fight Against All Dissensions."

exclusive of the contractor's fee. The fixed fee was $258,098 (about 3%). The contract provided that the camp should be ready for occupancy by the Government February 2, 1941 (120 days). Greely and Hanson of Chicago were employed by the Government for architectural and engineering work; and Major Carl Breitweiser was put in charge of the job for the Quartermaster Corps.

No contractor had ever been called on to recruit and employ a new organization of 20,000 employees in four weeks and to complete $20,000,000 worth of work in four months. Ben Hardaway and A. D. Creighton were charged with the financial responsibilities of Hardaway-Creighton. At one time they signed a note for $5,000,000 to cover the expenditures for labor and material before sufficient Government funds were received. Sam Jones of the Hardaway organization was named Project Manager, and W. E. Haswell, a Vice President of Foster and Creighton, with a representative of Hardaway headed up the Accounting Department. The construction of all buildings was the responsibility of Foster and Creighton Company with Cecil C. Robertson as Superintendent. General excavation, construction of roads, utilities, equipment operation and maintenance, and the furnishing of ready mixed concrete was the responsibility of the Hardaway Contracting Company organization. Wilbur Creighton, Jr., had the job of estimating, purchasing, and scheduling the delivery of all of the necessary materials for the job.

A lumber cutting and finishing mill 800 feet long and 32 feet wide was built with a temporary railroad track serving it. Forty-eight saws of all types were installed to precut 60 million board feet of lumber for the buildings. Before the end of November, material was moving to the job at the rate of 500 railroad cars per day. It was stored in

temporary sheds, on the ground with make-shift weather protection, and much of it was used as fast as it arrived. A fleet of 550 trucks brought the material in from distant railroad sidings and distributed it over the job. In addition to lumber, which was the largest single item to be handled, there were 2½million common brick, 5,000 kegs of nails, 127,350 barrels of cement, 335,000 tons of crushed stone, 12,200 doors, 34,597 windows and 388 tons of reinforcing steel. Other items included 110 miles of pipe lines, 53 miles of roads, a complete overhead electric distribution system, a 250,000 gallon elevated tank, and treatment plants for both water and sewage.

By December 1, 1940, 16,689 men were on the payroll. Employment reached a peak on January 29th at 20,300 and remained at that level until February 10th, then rapidly declined until March 3rd when 1800 were on the job. The Thirty Third Infantry Division started moving in on February 15th, and by the end of the month 25,000 men were stationed at Camp Forrest.

In December 1941, all construction work was taken from the Quartermaster Corps and turned over to the U. S. Army Corps of Engineers who were better qualified to handle the construction program from their eleven divisional offices, strategically located over the continental United States. Each Division Engineer reported directly to Lieutenant General Eugene Reybold, Chief of Engineers.

At the time of this change, The Company had a contract with the Quartermaster Corps to build 500,000 square feet of warehouses at the new Brookley Field Army Air Base near Mobile, Alabama. This contract was assigned to Lieutenant Colonel L. D. Worsham, District Engineer of the Mobile Office, located in the Federal Office Building, which had

been built by Foster and Creighton Company in 1936. Colonel Worsham advertised for bids on an Engine Test Building for Brookley Field, which was a very complex structure designed to test different types of motors, using different fuels and under different climatic conditions. This was the first building of its type built in the United States, and The Company had a very difficult time preparing the estimate. The Company submitted its proposal and was told that, since no other bids had been received and since its bid exceeded the Government estimate, the bid would be rejected and new bids requested.

Wilbur Creighton, Jr. told Colonel Worsham that The Company had a list of suggested changes in the plans and specifications which would reduce costs, and not interfere in any way with the operation of the testing equipment. Company representatives met with the Chief of the Estimating Section in the Corps' District Office and negotiated a contract at a mutually agreeable price.

Foster and Creighton Company, acting alone and as a joint venturer with Hardaway Contracting Company of Columbus, Georgia; Oman Construction Company of Nashville; and Forcum James Company of Dyersburg, completed more than three quarters of a billion dollar volume of various kinds of construction in Tennessee, Kentucky, Alabama, Arkansas, Mississippi and Florida during the Second World War. Most of the contracts were performed on a lump-sum basis, having been received after competitive bids had been taken. Only thirty-five million of this volume was on a cost plus fixed-fee basis. Not all of these contracts were profitable, and the fee was very low on the cost-plus jobs, which resulted in an increase of only $235,885 in the capital and surplus of The Company from war profits.

The assistance rendered by the Associated General Contractors of America(A.G.C.), as the liason between contractors and the War Department was an important factor in American success during World War II. This proved the Federal administration was right in expressing the need for a well organized association of general contractors after World War I. The Company has continued to take an active part in the work of the A.G.C. W. F. Creighton, Senior attended the first meeting of the A.G.C. in New Orleans in 1918 when it was organized; and he was the founder and first president of hte Nashville Chapter. Wilbur Creighton, Jr. has been a member of the National Advisory Board since 1939 and served as president of Consulting Constructors Council of America in 1967.

POST WORLD WAR II CONSTRUCTION

At the close of the war The Company had several large contracts with the Government which were not terminated when the war ended. Contracts with the Corps of Engineers were for buildings at Brookley Field in Mobile, Alabama; housing at Oak Ridge, Tennessee; a Shell Loading Ammunition Plant at Aberdeen, Mississippi; and the Naval Training Station at Pass Christian, Mississippi. The only contract terminated was the Goodyear Tire and Rubber Company Plant in Bordeaux, west of Nashville. With this large backlog of construction volume, The Company was able to make a gradual transition from Government construction to private work.

During the mid 1950's, the following officers directed the operations of Foster and Creighton Company: President, W. F. Creighton, Senior; Executive Vice President, A. D. Creighton; Secretary Treasurer, M. F. Sills; Assistant Secretary Treasurer W. E. Haswell; Vice Presidents, W. F. Creighton Junior, S. M. Porter,

W. B. Seagraves, and DeWitt Carter.

The officers of The Company realized that since there had been practically no private work during the war the possibility of a construction boom in this country was imminent, and if The Company expected to get its share of this work it would be necessary to make radical adjustments in former methods of operations.

During the twelve year period after the end of the war the main office of The Company remained in The First American National Bank, where The Company had maintained an office since the building was completed in 1917.

It was decided that by opening branch offices located in cities, where The Company was well known for past construction performance, it would have a better chance to negotiate building contracts in those areas; and by establishing the branch offices in central locations, more than one job could be handled from each office. Branch managers with varying degrees of authority were put in charge of offices in Birmingham and Mobile, Alabama; Chattanooga, Memphis, and Knoxville, Tennessee; and in Lexington, Kentucky.

Since all contracts for concrete paving and bridges were received from the different highway departments on a competitive basis, the Paving and Bridge Department was based at the Company yard on Clifton Road in Nashville.

Soon after these Branch offices were set up, The Company was fortunate in receiving a large volume of private work. Contracts were negotiated with The Wolverine Tube Division of the Calumet and Hecla Consolidated Copper Company for a Tube Mill at Decatur, Alabama; with Aluminum Foils, Inc. (now Consolidated Aluminum Company) for a

Plant at Jackson, Tennessee; a chemical plant at Tarpon Springs, Florida, for the Victor Chemical Company (now Stauffer Chemical Company); an addition to the Reynolds Alloys Plant and the Aluminum Castings Plant for The Ford Motor Company in Sheffield, Alabama.

Some of the contracts received during the last half of the 1950's were unprofitable and The Company Building and Highway Departments were both plagued with a number of lawsuits and claims. Most of the claims were petty, but two lawsuits were of a very serious nature.

The Knoxville Housing Authority sued Foster and Creighton for $480,000, claiming that leaks in the flat wood roofs of the Western Heights Housing Project were caused by the quality of the lumber used. The Company tried to prove the cause of the leaks was a lack of circulation of air in the Flat Roof design, which had been abandoned by the Government on all subsequent housing projects. The Company lost this case in court, and a judgement was rendered against it in the amount of $146,000.

In 1953 The Company formed a joint venture with the MacDonald Construction Company of Saint Louis, Missouri to submit a lump-sum bid on the $8,000,000 Cordell Hull Office building for the State of Tennessee. Ben Fite, the most experienced Company superintendent, was available and The Company owned enough equipment to build the job, but due to the estimated amount of the contract, the bonding company recommended that Foster-Creighton join with another contractor on the bid. The Company received the contract, and the work was performed entirely by Foster and Creighton personnel. The job was completed ahead of schedule and the estimated profit realized.

Following this profitable experience on the Cordell Hull Building,

A. D. Creighton and Gene MacDonald decided to form another joint venture to submit a bid on the $9,000,000 Airframe Overhaul Structure for Trans World Airlines at the Mid-Continent International Airport north of Kansas City, Missouri.

The specifications called for completion of the contract on or before October 5, 1957, which was 457 calender days after the contract date with a penalty of $1500 per day for failure to complete the job on time. The Company was the successful bidder on this contract, and, realizing there was a possibility of an overrun in time, an insurance policy was taken out with Lloyd's of London, in which they agreed to pay MacDonald-Creighton Company ninety percent of any liquidated damages assessed by the owner.

This job was doomed from the start. Louis Boos, MacDonald's superintendent could not cope with the radical union element on the job, and, as a consequence, 60 days were lost due to strikes and jurisdictional disputes, and a 64-day delay was caused by severe weather conditions. The Company claims for extension of time due to these delays were disallowed, and it was charged with $186,000 liquidated damages. Trans World Airlines filed a $3,800,000 suit against The Company, claiming losses due to failure to complete the facility on time. But The Company attorney in Kansas City persuaded the court to rule that T.W.A. could not maintain a suit for damages beyond the amount of liquidated damages stated in the contract; and after a suit filed against Lloyd's of London, The Company recovered $91,500. This was the end of Foster and Creighton's participation in lump-sum joint venture contracts.

The Company made a profit on other jobs during this period, but was not in the best financial condition when the annual meeting was held March 1, 1958. At this meeting the following officers were elected: Wilbur F. Creighton, Jr., President; Sam M. Porter, Executive Vice President; Robert T. Creighton, First Vice President; James S. Dunbar III, Second Vice President; W. E. Haswell, Secretary Treasurer; and H. F. Gambill, Assistant Secretary Treasurer, W. F. Creighton, Sr., A. D. Creighton, and M. F. Sills remained on the Board of Directors in an advisory capacity.

Soon after the election of Wilbur F. Creighton, Jr. to the Presidency of the Company, he told Mr. Parkes Armistead, President of First American National Bank, that The Company had completed a volume of over $27,000,000 and was number 61 in the Engineering News-Record list of the top contract winners in the country. Mr. Armistead replied that he had no interest in the amount of business done; all that mattered to him was the amount of Company capital and surplus at the end of the year. His words made a profound impression on the officers of The Company and, since that date, The Company has been able to improve its financial condition each year.

After World War II the office force was increased as The Company expanded its operations, and it soom became apparent that The Company office space in the First American Bank Building was inadequate. The bank was also expanding and needed more space in the building for its own use. As a result, Foster and Creighton moved its Road and Bridge Department into offices at its equipment yard on Clifton Road. At first, this seemed to be a solution to the problem, but The Company soon

outgrew the available space at the yard.

In 1959 The Company bought eight acres on Armory Drive in Sidco and built a combination office, warehouse, and shop building, 183 feet long and 72 feet wide. The Company now had excellent maintenance and repair facilities for its equipment which at that time was valued at $3,000,000. At first the Directors planned to locate all of the offices in buildings at the new yard, but finally decided to build on another lot in Sidco at the corner of Thompson Lane and Foster-Creighton Drive. This two-story building with 20,000 square feet of floor space was more than adequate, and allowed The Company to bring the road, bridge, and building departments together for the first time in 15 years. The first meeting was held in the new building October 19, 1961.

During the twenty year period following the end of World War II all of The Company branch offices were very successful in securing contracts for buildings and industrial plants.

The Memphis office, under the direction of Bob Creighton, had contracts for the West Tennessee Tuberculosis Hospital, Highland Plaza Shopping Center, University of Tennessee Pathology Building, East High School on Poplar Avenue, and the Bellevue Baptist Church.

Paul Hunter and his crew in the Birmingham office built the Homewood Garden and the Highland Towers Apartments, the U.S. Naval Armory, the Tuscaloosa High School, and an addition to Saint Vincent's Hospital.

The Chattanooga office completed the Tuberculosis Hospital, the Power Service Center for the T.V.A., Super Service Truck Company Terminal, the Emma Wheeler Homes Housing Project, an office building for South Central Bell and a gymnasium and natatorium for the University

of Tennessee, Chattanooga.

The Knoxville office had contracts for an addition to the Foote Minerals Company Plant, Super Service Company Truck Terminal, Saint Mary's Memorial Hospital Addition, the Oak Ridge Hospital and the Cyclotron Building for the Atomic Energy Commission, Rich's Incorporated Garage, Western Heights Housing Project, Fulton High School, and, at the University of Tennessee, the Law Library, Student Activities Building and Neyland Stadium and Dormitory Addition.

The Mobile Office, opened in 1935 when The Company built the Court and Custom House Building, continued in operation until 1965. Contracts were for buildings and industrial plans included the Mobile Police Building, Creighton Towers Apartment House, W. T. Grant Store Addition, Provident Hospital and Mobile Infimary Additions, International Paper Company Office Building, Vigor School Addition, Post Office at Biloxi, Mississippi, Olin Mathieson Chemical Corporation Plant at McIntosh, Alabama and additions to The Cortaulds North America Plant at Lemoyne, Alabama.

From the beginning of the Korean War until national involvement in Vietnam, The Company, in joint ventures with other contractors, completed the following contracts for the U.S. Army Corps of Engineers: Wind Tunnel and Testing Facilities at the Arnold Air Engineering Development Center at Tullahoma, Tennessee; Phosphate Development, Caustic Soda and Chlorine Plants at Sheffield, Alabama; Rehabilitation of Load Lines for the production of R.D.X. at the Holston Ordnance Works, Kingsport; Rehabilitation of ten T.N.T. Lines and Supporting Facilities at the Volunteer Army Ammunition Plant at Chattanooga. All of these projects, representing a total construction volume of more than

$200,000,000 were completed within the scheduled completion time. The testing facilities, ammumition, and other war material produced in these plants were vital factors in the development of the space program and in the success of American armed forces in both Korea and Vietnam.

BRIDGES, HIGHWAYS AND HEAVY CONSTRUCTION

In 1915 the United States Congress appropriated funds for the construction of a system of interstate highways for the nation to be directed by the newly formed Bureau of Public Roads. The government was authorized to pay one-half of the cost and permit construction to start on an approved project when the state had appropriated funds to pay its half of the cost. State sovereignty was recognized and the state was given latitude to select the type of road to be built, which was determined by the state's ability to pay half of the cost. Highway departments were organized in every state. They purchased the rights of way, made location surveys, and prepared plans and specifications which were submitted to a representative of the Bureau for approval. Bids from contractors were opened in public and contracts were awarded to the lowest bidder, unless the bids exceeded the state's estimate of the cost.

Before the creation of the Bureau of Public Roads, highway building had been done by the counties, under the direction of a road commissioner. Most of these men had no technical knowledge of road building and some of them used the authority for personal gain.

Prior to World War I, The Company was recognized as one of the top bridge building organizations in the South, but its experience in road building had been limited to the construction of subdivisions and

city streets in Nashville. The officers of The Company realized that due to the increasing number of automobiles on the streets and highways, the public would demand better roads and that there would be an ever expanding highway program, backed by funds from the federal government. They decided to organize a road and bridge department which would be ready with modern road building equipment and personnel to submit proposals on the jobs which were being planned by the states. This organization was placed under the direction of James S. Dunbar Jr., Vice President of The Company, with Sam M. Porter, a recent graduate of Vanderbilt, as his assistant.

STONE BASE ROADS

In 1921 the Commissioners of the State of Tennessee, Department of Highways, took bids on the first units of Highway Number 1, running in Tennessee, from Bristol to Memphis. This was part of a planned highway to extend from coast to coast, known as "The Broadway of America."

In the early summer of 1922 The Company was the successful bidder on the "Telford Type," stone base and asphalt surfacing of a 9 mile section of this highway in Dickson County, from Burns, Tennessee, east to the Cheatham County line. The grading of the project had been completed the previous year under another contract and the road bed was in an excellent condition. Before the letting (when bids were taken), a large amount of quarried stone at the lime kiln in Burns was thought to be sufficient to complete the entire project; however, after about two miles of Base had been laid on the Burns end of the job, it developed that this source of material was exhausted. Sam Porter, the superintendent on the job, was fortunate enough to find suitable rock in the ravines on each side of the road, but the good stone ledges were

about 200 feet below the elevation of the road and about a mile away. After considerable clearing and stripping of overburden, quarries were opened where rock was drilled with steam driven tripod drills and shot from the face of the quarry. The loose rock was beaten down to man size dimension with 16 pound hammers. These stones, about the size of a man's head, were hauled in one cubic yard, slat-bed wagons and dumped on the subgrade. After the base stones were placed close together, on the grade, the tops were napped off with 4 pound hammers. The voids were filled with spalls and crushed stone until the base was well choked. It was then rolled with a steam driven roller and covered with 1½ inches of fine crushed stone. The surface was graded with a grader pulled by a team of mules and rolled again. One gallon of penetration asphalt was then applied to each square yard of surface which was then covered with 3/4 inch to 1/4 inch stone chips. The surface was then covered with 3/4 gallon of penetration oil, per square yard, and the surface was sealed with asphalt.

The route of Federal Highway Number 1 was later changed to eliminate two underpasses, but part of the old route is still in use near the south entrance to Montgomery Bell Park.

Since this was the first major road project undertaken by The Company, and since it was so close to Nashville, the job was visited often by the officers of The Company. Sam Porter, who was in charge of the construction, had this to say about Mister Robert T. Creighton, who had been retired for two years, from the Presidency of the Company.

> "I got to know Mr. Creighton real well on this job. He must have been around seventy years of age, in seemingly perfect health, and of a wonderful disposition. We started to work at six o'clock a.m., six days a week, and worked from then until six p.m. Mr. Creighton commuted from

> Nashville each day and the train, which was a "Local," came through White Bluff at seven a.m. I would go the rounds from six until seven, and then pick him up at the depot. He would stay in the car all day with me, and seemed to enjoy all of the goings on from one end of the job to the other. What impressed me most about Mister Creighton was that, while interested in the progress of the job, he never interfered in any way and never gave any advice unless called upon. I have never met a more polite person. We ate lunch at a boarding house where a large, mixed crowd gathered at noon, and he was most considerate of everyone, particularly of the ladies. All in all, he was one of the finest gentlemen I've ever known, and one of whom all his family should be justly proud."

Governor Austin Peay was inaugurated January 16, 1923 and, the following month, sent both branches of the Tennessee State Legislature his Reorganization Bill which combined all of the 64 different bureaus, boards, commissions and offices into eight departments, each with a head, known as a Commissioner. A Department of Highways and Public Works, was created by the Legislature and the three commissioners of the old law were replaced by J. G. Creveling, as Commissioner, who was wholly responsible for the competent operation of the Highway Department. Taxes from the sale of gasoline and automobile licences became the approved source of revenue. Governor Peay was known as the "Road Building Governor," because when he came into office he found only a few hundred miles of paved roads, but at the completion of his second term, in 1927, more than 6,000 miles of hard surfaced roads had been completed.

After the completion of the Dickson County job The Company's Road and Bridge department was off to a good start. Contracts were received with the Highway Department for a warehouse and garage complex at 23rd and Cedar Street in Nashville and on a 9 mile section of road in Putnam County from Cookeville, Tennessee, east, through Algood to the

county line. Sam Porter was put in charge of the job. The grading and drainage was included in this contract and the specifications called for a crushed stone base graded from coarse material on the bottom, to fines on top. This necessitated the rental of more trucks from the State and the purchase of a modern Rock Crusher Plant. Mule-drawn wheel scrapers, were used to make the earth fills and slip scrapers, pulled by a single mule, were used to build up the shoulders on the road. Rock was hauled from the quarry to the crushing plant in bottom dump mule drawn wagons and crushed stone was hauled to the job in hard rubber tired "Armleader" trucks, which had been used by the Government in World War I and were in poor condition.

Wilbur Creighton, Junior served as timekeeper on this job, during the early period of construction and rode a horse to check on the different crews of men in the quarries and scattered from one end of the job to the other.

Many complaints were received from farmers living on each side of the road due to the noise, dust and blasting but the only case brought to court involved a claim that a bull had been killed on a farm adjoining The Company rock Quarry. When no loose stone was found on any part of the farm, The Company's lawyer proved that the bull could not have been killed by blasting because the face of the quarry was directed away from the pasture. The farmer, when confronted with this evidence, said that the bull must have died from the shock of the blasting, if not from falling rock.

CONCRETE PAVING

In 1924 the Company received a contract with the newly formed, Tennessee Department of Highways and Public Works for concrete paving

on an 11 mile section of Federal Highway Number 30, in Maury County, from Columbia, Tennessee, south to Mt. Pleasant. The State of North Carolina had concrete paving contracts under construction, but this was the first contract of this type awarded in the State of Tennessee.

J. S. Dunbar, Cecil Robertson and Sam Porter made a detailed study of the concrete paving operations of other contractors in North Carolina, before designing the concrete plant and spending $100,000 for new equipment necessary to build the job. Crushed stone for coarse aggregate was quarried and produced at The Company's Carter's Creek plant, 6 miles from the batcher plant.

The first concrete paver was a gasoline powered, "Koehring 27 E," crawler type, which had one cubic yard capacity. This proved to be a fine machine and was used for several years after the completion of this first job. The concrete batcher plant was built on a railroad siding near the middle of the job, where the one-cubic-yard batches of sand and stone were weighed, placed in batch compartments which had been built on the job, and installed on new, hard-rubber tired, "Mack" trucks. Cement was delivered to the plant in sacks and the proper amount was placed in each batch before the trucks were sent to the paver. Wood side forms were firmly anchored to the ground and the surface of the poured slab was screeded and finished by hand. The only expansion joint was located at the end of a days' pour, which was about 800 feet in length. The finished and hardened slab was cured by placing a layer of loose dirt on it and keeping it wet for several days. Cecil Robertson was put in charge of the job with Amos Johnson as his assistant. Amos Johnson served The Company as Superintendent and General Superintendent of Concrete Paving from the time this job was completed until his

death in 1956, when John Holloway, who had been in the Paving Department since 1931, was made General Superintendent.

The Maury County job was widened to take care of the increased traffic but the original center section served in its original state for more than 30 years before it was covered with asphalt.

The expansion of the concrete paving and bridge building operations of The Company after World War II was due primarily to the leadership and experience of Sam M. Porter who served as an Executive of The Road and Bridge Department from the time of its formation in 1922, until his death, in 1967. He was the first President of the American Concrete Paving Association and served as President of the Tennessee Road Builders Association. During this 45 year period The Company had contracts for concrete paving and bridges in 12 states. At one time it had a contract for a section of the Ohio Turnpike on the shore of Lake Erie on the North, the Gulf Outlet Canal Bridge in New Orleans on the South, concrete paving of a section of I-40 at Durham, North Carolina, on the East, and concrete paving and bridges in Shreveport, Louisiana, on the West.

The Company's very modern central-mix plant and paving equipment was the first used in the state of Alabama; and on a section of I-40 at Hazen, Arkansas, more than one mile of single lane concrete pavement was placed within one working day. After The Company had completed a contract for paving the 12 mile section of I-65 north of Nashville, from Trinity Lane to the Davidson County line, all of its concrete paving equipment was sold to another contractor. This had been a very profitable job, but the Interstate program in Tennessee was nearing completion, and the Directors felt there would be too many

contractors scrambling for the few remaining concrete paving jobs.

Bill Bowers, whose father preceded him in The Company, was selected to take charge of the Road and Bridge Department with Billy Joe Price and Paul McLendon responsible for operations in Alabama, Arkansas, Georgia, Louisiana and Tennessee and Ralph Blakeman in charge of The Company's West Virginia bridge operations with headquarters in Charleston.

The first major contract in West Virginia was with the Huntington District, Corps of Engineers, for a highway bridge over the Gauley River, now a part of the Summersville Reservoir. The job was completed ahead of schedule, and in 1965 the American Institute of Steel Construction in its Prize Bridge Competition, selected it for an Award of Merit in the Long Span category. Since that time the West Virginia office had completed contracts in 19 West Virginia counties, and in 1973 The Company received a $7,000,000 sub-contract with the American Bridge Division of U.S. Steel Corporation for the concrete piers and deck work on the 3,030 foot long bridge across the New River Gorge, in Fayette County. When completed, this will be the world's longest steel arch bridge, with a 1,700 foot long main arch span, rising 900 feet above the Gorge.

Most of The Company's bridge work since World War II has been in West Virginia; however, since 1961, the following dollar volume of bridge construction has been completed in other southern states: Louisiana, $30,000,000; Arkansas, $10,200,000; Georgia, $3,500,000; Alabama, $3,000,000; and Tennessee, $1,000,000. The largest bridge contracts were the $10,000,000 bridge, across the Gulf Outlet Canal, east of New Orleans, Louisiana, and the bridge deck and approaches to the Mississippi river bridge at Baton Rouge.

The cofferdams used to build the two river piers on the Gulf Outlet Canal bridge were the largest ever built in Louisiana and among the largest in the United States. They were 122 feet long, 52 feet wide and 65 feet deep with 24-inch steel-pipe piles, filled with concrete, driven 100 feet below the bottom of the pier. Each coffer dam required 180 tons of structural steel for bracing.

HEAVY CONSTRUCTION

The term "Heavy Construction" is generally used to include docks, piers, shipways, power plants, etc., as distinguished from bridges, highways, industrial plants and buildings; and The Company has had its fair share of this type of construction.

At the close of World War I The Company took a contract with the City of Nashville to build a River and Rail Terminal on the Cumberland River at the foot of Broad Street. The river was very low during the early stages of construction, which permitted the completion of the foundations by using sand bags around the footings instead of expensive coffer dams. Cheatham Dam, below Nashville, had not been built at that time and the river became very low during the dry summer months.

DAMS AND POWER PLANTS

The advent of the T.V.A. in the South after May 18, 1933, when President Franklin D. Roosevelt signed the Tennessee Valley Authority Act was a serious blow to the construction industry. The Corps of Engineers continued to use private contractors on their projects, but all of the dams and power plants included in the T.V.A. program were built with government forces. Prior to the creation of T.V.A., the Southern Cities Power Company, a private corporation, built a series of small dams and power plants on Duck River, in middle Tennessee.

Freeland and Roberts Company, a private engineering firm of Nashville, was employed to prepare plans and specifications for most of these projects and proposals were taken from general contractors throughout the area. The Company submitted the lowest bid and was awarded the contracts for Courtner, Columbia, Shelbyville and Lillard's Mill (near Lewisburg, Tenessee).

The construction methods used to build the Lillard's Mill job, in 1927, were generally the same as those used on the others. There was a shoal in the river at the site selected for the project and the river was only two or three feet deep except in periods of extreme high water. Work was started with the construction of a coffer dam around the power house foundation. This dam was constructed as follows: two walls of double layered, two inch boards, six feet apart, were driven by hand down to the rock bottom of the river. The six-foot space between these two parallel walls was filled with clay which was puddled down to a solid consistency by men stomping on it as it was dumped into the dam. This type of dam is also known as a puddle dam. Log cribs, ten feet square filled with loose rock were used on the down stream side of the dam for bracing and steel rods placed at six-foot intervals through the six foot space were used to hold the two parallel walls in place after this space had been filled with clay. Rock from the excavation was removed by hand and loaded on a small dump car, running on rails extending from the foundation up a steep bank where the rock was dumped out on the bank. The car was pulled up by a cable attached to the drum of a gasoline hoisting machine. Cement, in bags, was hauled, on one four ton truck, from the nearest railroad siding 6 miles from the job. The concrete was mixed in a gasoline powered mixer

of one half cubic yard capacity. All sand and gravel for the concrete was dug, by hand, from a gravel bar near the site and hauled in wagons to the gravel washing plant. Gravel and sand were separated by passing all material through a rotary screen, powered by a pulley attached to a farm tractor. The sand was washed several times in a metal tank until it became clear. All concrete was placed in the dam and power house with wheelbarrows. After the powerhouse had been built, the gates were opened allowing the river to flow through it during the construction of the dam. A fish ladder was built over the dam but the fish never learned to use it, even when they were placed inside. This was the last job built by The Company with such a small amount of equipment.

THE NASHVILLE WATER WORKS

After World War II, Bob Lawrence, Director of the Nashville Water Works Department, recongized the fact that the water intake facilities at the pumping station were entirely inadequate for the growing population of Metropolitan Nashville. The J. N. Chester Engineering Company of Pittsburgh was employed by the city to prepare plans and specifications for a new, modern intake structure in the river near the pumping station, with a bridge connecting it to the pumping station and a new 48 inch line from the intake at the river to the deep well in the plant. Bids were taken and The Company submitted the lowest bid.

Work was started on the excavation for the intake pier foundation, located about 50 feet from the river bank. A steel sheet pile coffer dam was set in place around the foundation and driven down to solid rock. Pumping was started with the usual pumping equipment, but it was found that water was flowing into the dam faster than it could

be pumped out. It soon became evident that there was some very unusual obstruction on the river bed, under the sheet piles, which was preventing the dewatering of the dam. A diver was employed to investigate conditions around the outside of the dam to try to determine the nature of the obstructions. He reported that some of the sheets were resting on the top of large dressed stones and were not down to the natural river bed. By using a large clam-shell bucket, these stones were finally removed and dewatering of the dam was accomplished.

After the coffer dam had been sealed and the foundation for the pier had been built, Allan Sharp, Assistant Water Works Engineer, found drawings in the office files which showed the location and details of an old stone crib filter system, which had been built in 1898, in an effort to filter the water at that time.[14] If this information had been available when the plans were prepared, the location of the pier could have been moved 50 feet down stream and no obstruction would have been encountered. The Chester Engineers claimed that since Foster and Creighton Company had built the railroad bridge near the site in 1912 and since Major Foster was an engineering consultant to the Water Works Department when the system of stone filters was built, The Company records should have shown the location of these filters. This argument did not prevail, and The Company collected damages from the City for delays encountered in the construction of the pier.

DOCKS, SHIPWAYS AND TERMINALS

The Company's Mobile, Alabama office closed after the completion

[14] Wilbur F. Creighton, Sr. Building of Nashville (Nashville, 1969), pp. 47-52.

of the Engine Test Building at Brookley Field in 1946, but was soon reopened after James Dunbar, Senior and Sam Porter submitted the low bid on the Saint Joseph Street overpass job over the railroad yard north of the city.

Following the completion of this job, The Company was awarded a $700,000 contract to build Berth Eight at the Alabama State Docks. Skilled labor was plentiful since men were returning from the service and were anxious for jobs on private construction projects. A very unusual accident occurred on this job which could have had serious consequences if someone had been seriously injured. Berth Eight was located on the Mobile River at the northern city limits where World War II Freighters and Liberty ships continually passed the job on the way to a mooring up the river where they formed a mothball fleet to await the outbreak of the next war. Some of these ships discharged Bunker "C" oil in the river before they reached the mooring; oil covered the river from bank to bank most of the time. During the concrete form wrecking operation, two men were under the concrete deck pulling down sections of the forms and placing them on a small raft. When the raft was loaded and they were ready to paddle out from under the deck, one of the men lit a cigarette and threw the match in the water. Unfortunately, one of the small gasoline engines on top of the deck immediately above the raft was being filled with gasoline and some of the gas dripped down through an expansion joint to the exact place where the lighted match had been thrown. The resultant explosion, did not damage the concrete deck, but blew the two men off the raft and into the water. They were soon pulled from the oily water and neither was injured seriously.

During the seventeen years following the completion of Berth Eight, The Company received contracts for all types of projects, including the following, which are classified as Heavy Construction: Addition to the Alabama Power Company's Chickasaw and Barry Steam plants on the Tombigbee River north of Mobile; repairs and extension of four shipways for the Ingalls Shopbuilding Corporation (now Litton Industries) in Pascagoula, Mississippi; sludge treatment facilities, foundations and 340,000 cubic yards of hydraulic fill for the addition to the Scott Paper Company Plant at Mobile; river intake and foundations for the addition to the Allied Paper Corporation Plant at Jackson, Alabama; water treatment plant for Marathon Paper Company, at Naheola, Alabama; and the ore terminal and dock for the United States Steel Corporation (Tennessee Coal and Iron Division) at Mobile.

The T.C.I. job, as it was called, was the largest project of this type ever built by The Company. The contract called for the following work to be done: remove an old Terminal building supported on wood piles and dredge for a new slip 250 feet wide and 1000 feet back from the river bank, build a concrete deck on the south side of the slip, 960 feet long and 80 feet wide, supported on steel piles furnished by T.C.I., build a marginal, barge wharf on the north side of the slip, install two pairs of heavy crane rails on the deck to carry the Gantry Crane furnished by T.C.I., and build office buildings and railroad sidings on the site. All work was done with Foster and Creighton forces except the pile driving, which was subcontracted to Ernest Construction Company of Mobile, and the dredging, subcontracted to the Standard Dredging Company of New Orleans, Louisiana. Some of the steel piles driven were 16 inch square box piles 90 feet long. In order

to increase the bearing value of the piles, short sections of pile material, called spurs, were welded to the sides of the pile at a place where it would rest on a hard layer of material when driven to that depth. James Dunbar, III was Branch Manager of the Mobile Office with Ward Pride, Gordon Wilder and Mrs. Lamania Barthes handling the office work. Scuyler Page, Jr. was Chief Estimator, assisted by George Jensen, Dave Heath, S. Eugene Dewell and William I. Price. When Billy Price reported to Scuyler Page, after Billy had graduated from Vanderbilt, Scuyler, who had worked for other General Contractors over the nation told him that if he would apply himself he would be assured of a great career in construction. He declared that Foster and Creighton Company was like England, it always managed to muddle through somehow.

NASHVILLE THERMAL TRANSFER CORPORATION PLANT

In 1969, Nashville city officials, led by Mayor Beverly Briley, were considering the possibility of building a central plant on the west side of the river, designed to provide heating and cooling for the public buildings on the city square. I. C. Thomasson and Associates, of Nashville, were employed to made a feasibility study of the project. At first, the use of natural gas was considered as a fuel for the plant but reports were received indicating that there was a possibility that the use of natural gas would be restricted and the cost of electrical power was considered prohibitive. During this discussion, Beverly Briley suggested that solid waste be used as a fuel for the plant. At this time, the city was facing up to an impending crisis resulting from the rapid depletion of available landfill areas for disposal of the city's solid waste. The value of the use of solid

waste as a fuel was immediately recognized.

The result was the formation of the Nashville Thermal Transfer Corporation, a completely independent, non-profit corporation, organized for the purpose of building a plant and supply lines for the purpose of furnishing chilled water and steam to public and private buildings in the downtown area. Farris A. Deep, Director of The Metropolitan Planning Commission, was named President of the corporation.

The principle of burning solid waste as a source of energy, has been well established, since there are more than a dozen such plants in operation in this country and in Europe; however, the Nashville plant, will be unique in that it will burn solid waste to generate steam which will be used to heat buildings and also drive centrifugal chillers to produce chilled water for building cooling.[15]

In the spring of 1972 competitive bids were taken on the plant and on the distribution lines. Foster & Creighton's proposal of $9,536,000 was the lowest received for the plant but this amount exceeded the available funds by $1,100,000. Following a series of consultations between The Company, Nashville Machine Company (the subcontractor for mechanical work), other subcontractors, and the I. C. Thomasson and Associates a contract was negotiated with The Company to build the plant for $8,400,000.

In addition to surmounting these initial hurdles, the actual

[15] Maurice J. Wilson (systems design consultant for I. C. Thomasson and Associates), "Report to Vanderbilt University Engineering Alumni Association" October 19, 1973.

"Old Trash is Nashville's New Fuel," Constructor (The Associated General Contractors of America), August 1973, pp. 22-27.

"Energy Perspective," Domestic Engineering Journal, December 1972, pp. B18-B20.

construction of the plant faced other challenges. One of the city's main sewer lines runs through the site and plans had tc be altered to solve this problem. Core explorations showed that the subsurface was of two distinct types, with the incinerator resting on solid rock and the chilling plant on fill. This situation was remedied by driving 80 steel piles in 30 to 35 foot lengths down to solid rock. Minor difficulties involved clearing away an old existing dump and the relocation of a railroad spur. None of these problems were insurmountable; in fact, they were par for the course on a construction job.

H. Roy Slaymaker, Executive Vice President of The Company, supervised the project; Warren O. Lamb directed the purchases, scheduling and councils with the I. C. Thomasson and Associates. The superintendent was Angelo C. Colombo. The project was well ahead of schedule in 1973 and was expected to be in operation before the spring of 1974.

BUILDING CONSTRUCTION
Nashville, Office

From 1967 to 1973, all of The Company building operations were directed from the main office in Nashville, or from the branch office in Lexington, Kentucky.

After several years of planning and experimenting with various types of computer equipment, a Century Model Number 50 computer was leased from the National Cash Register Company and installed in the Nashville office in 1971. The Company computer department began processing all payrolls including the payrolls of the Lexington, Kentucky and Charleston, West Virginia offices. Job progress scheduling, formerly done manually on critical path charts, was processed by using this equipment. The computer was proving to be a useful tool in the management

of The Company.

The following key jobs were built in Nashville by The Company between 1947 and 1967.

Vanderbilt University

McGill Hall
Tolman Hall
Cole Hall
Kissam Quadrangle Dormitories
Vanderbilt Memorial Gymnasium
A. B. Learned Laboratory Building
Vanderbilt Hospital
West Wing Addition
The Married Student's Apartments

Tennessee State University

The Library Building
Engineering Building
Student Union Building

Fisk University

Student Union Building
Du Bois Dormitory

State of Tennessee

Boiler Plant at the Tennessee State Prison
Mid Tennessee T. B. Hospital
Cordell Hull State Office Building

Church Contracts

The West End Synagogue
Jewish Community Center
Phillips Memorial Library for the Disciples of Christ

Industrial Contracts

Ferro Corporation
Super Service Motor Freight Lines Terminal
Beaman Bottling Company Plant
Genesco at Genesco Park: Administration Building, Plants and Distribution Terminal

Store Contracts

National Stores Incorporated Building
Levy's Store
Sears Roebuck Store
Cain Sloan Department Stores on Church Street and in Green Hills

Private Contracts

Nashville Machine Company Office Building
Nashville Electric Service Center
Crescent Amusement Company Movie Theater in the Warner Building
Western Electric Company Distribution Plant
St. Thomas Hospital Nurse's Home
The Baptist Hospital Addition
Donelson Shopping Center

LEXINGTON OFFICE

The Kentucky Area Office, with headquarters in Lexington, Kentucky, was started in 1953 with Albert R. Christian as Area Manager. The first jobs received were for the University of Kentucky and The Company was fortunate in keeping its forces busy on the Kentucky campus for the following two decades. A central office was built in 1968 and the office staff was increased to handle the large number of contracts in the central Kentucky area. Miss Rebecca Harris, who had over twenty years accounting experience with The Company, was in charge of the bookkeeping department in 1973. Among the larger buildings built for the University of Kentucky were the Albert Chandler Medical Center, the Classroom-Office Building, the Spindle Top Research Center and the High and Low rise Dormitories.

In 1973, The Company had a $3,400,000 contract to build The Thomas Hunt Morgan School of Biological Science.

The Company had completed building contracts in Kentucky at Western Kentucky University in Bowling Green, at Eastern Kentucky State University at Richmond and in 1973, on the Eastern Kentucky campus, work on

a $5,000,000 contract for a Law Enforcement Traffic Safety Center to be used to train law enforcement officers from three adjoining states. During 1972 the Lexington office completed the following hospital contracts in Lexington: additions and alterations to The Central Baptist Hospital, Good Samaritan and Saint Joseph Hospitals and the construction of a 370 bed Medical, Surgery and Nursing Veterans Hospital. These four hospitals have a combined capacity of 800 beds.

The Lexington office between 1953 and 1973 completed more than a $130,000,000 volume of all types of building and industrial construction, most of which was received on a competitive bid basis.

FIRST AMERICAN NATIONAL BANK

When Wilbur Creighton, Senior signed a contract in 1916 with The Fourth and First National Bank for a building to be erected on the corner of Fourth and Union Streets, he did not realize that his grandson, Wilbur Creighton, III, would be President of the company when the new First American National Bank Building was completed on the same site 57 years later.

This building with a 28-story tower and 4-story low rise banking facility represented a construction investment in excess of $20,000,000 and was, perhaps, the largest office building complex in Nashville. It occupied a full block of downtown Nashville from Union to Deaderick Streets between Third and Fourth Avenues. It was a joint venture of First American and the Equitable Life Assurance Society of the United States.

John Charles Wheeler and Associates of Nashville was the architect and the Perkins and Will Partnership, of Chicago, served as associate architect. Paul Krambeck was the Project Manager, with George M. Spence

the Superintendent for Foster and Creighton Company. Charles D. Hutsell, estimator for the company, directed the scheduling, purchasing, engineering and counseled with the architect and representatives of the bank. H. Roy Slaymaker, Executive Vice President of the company, directed the project.

Officers of the bank responsible for the project were Andrew Benedict, Chairman of the Board, William F. Greenwood, Vice-Chairman, T. Scott Fillebrown, Junior, President, Robert O. Franklin, Senior Vice-President, and James W. Hardwick, Assistant Vice-President.

The first tenant moved into the building April 28, 1973 and the main banking room was opened Monday July 30, 1973, one month ahead of schedule. The total cost was within the original budget estimate.

WILBUR F. CREIGHTON, III, PRESIDENT

Without question, 1972 was the best year in the history of the company. The total volume of business performed by Foster & Creighton Company and its subsidiaries during the year was $67,562,000 which was double the amount reported the previous year, and there were no unprofitable jobs.

At the annual meeting of the Board of Directors of The Company, Wilbur F. Creighton, III was elected President and Wilbur F. Creighton, Junior was elected Chairman of the Board with the following other board members: William G. Bowers, Albert R. Christian, H. F. Gambill, David S. Heath, H. Roy Slaymaker and Thurman H. Whitworth.

Foster and Creighton Company which was started in Nashville by Major Wilbur F. Foster and Robert T. Creighton in 1885, had, after 88 years of construction service to the Nashville community and the South, a member of the fourth generation of the Creighton family in its top management position.

Foster & Creighton is proud of the fact that, throughout its long history, every contract has been completed without a single loss to any surety.

The Foster-Creighton Story, in substantially the same form, was delivered by the author at a meeting of PARAGRAPHS FROM NASHVILLE HISTORY co-sponsored by The Public Library of Nashville and Davidson County and The Metropolitan Historical Commission on April 9, 1973.

Bibliography

Creighton, Wilbur Foster, Sr. BUILDING OF NASHVILLE. Nashville, 1969.

_____. "Construction From a Contractor's Viewpoint." Manuscript. Foster and Creighton Co., Nashville, 1968.

_____. THE LIFE OF MAJOR WILBUR FISK FOSTER: A CIVIL ENGINEER, CONFEDERATE SOLDIER, BUILDER, CHURCHMAN AND FREE MASON. Nashville (Ambrose Printing Co.) 1961.

_____. LIFE STORY OF ROBERT THOMAS CREIGHTON. (Nashville, n.p., 1967.)

_____. THE PARTHENON IN NASHVILLE: PEARL OF THE TENNESSEE CENTENNIAL EXPOSITION. Nashville, 1968.

Creighton, Wilbur F., Jr. "Wilbur Fisk Foster: Soldier and Engineer." TENNESSEE HISTORICAL QUARTERLY, 31 (Fall, 1972), 61-75.

"Energy Perspective". DOMESTIC ENGINEERING JOURNAL. December, 1972, pp. B18-B20.

Fine, Lenore and Jesse A. Remington. THE CORPS OF ENGINEERS: CONSTRUCTION IN THE UNITED STATES. Washington, U. S. Government Printing Office, 1972.

Justi, Herman, ed. OFFICIAL HISTORY OF THE TENNESSEE CENTENNIAL EXPOSITION. Nashville, Press of The Brandon Printing Co., 1898.

Knott, Lawson B., Jr. "Federal Office Building, Nashville, Tennessee, Historical Notes," Washington, D. C., 1965.

McGee, Gentry R. A HISTORY OF TENNESSEE FROM 1663 TO 1924. 1927; reprint. Nashville, Charles Elder, 1971.

Mooney, Booth. BUILDERS FOR PROGRESS: THE STORY OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA. New York, McGraw Hill, 1965.

NASHVILLE DAILY AMERICAN. March 20, 1877. March 9, 1884

"Old Trash is Nashville's New Fuel." CONSTRUCTOR. August, 1973, pp. 26-27.

Reynolds, Richard Samuel, THE ENGINEER REPORTS: MEMOIRS. Nashville, 1972.

Stromquist, Victor H. and Robert T. Quarles, Jr. Collection of "Capitol", or "Strickland", Papers found during the remodeling of the Tennessee State Capitol, Tennessee State Library and Archives, 1957.

"The Tennessee Valley Authority." SYSTEMS CONTROL NEWS. May 1, 1973.

Walker, John S. "Wilbur Fisk Foster, M. Am. Soc. C. E." TRANSACTIONS OF AMERICAN SOCIETY OF CIVIL ENGINEERS, 86 (1923), 1658-1666.

Williams, Loren R. "First Baptist Church." SEVEN EARLY CHURCHES OF NASHVILLE. Nashville, Elder's Bookstore, 1972.

Wilson, Maurice J. "Report to Vanderbilt University Engineering Alumni Association." October 19, 1973.

FOSTER AND CREIGHTON COMPANY PERSONNEL

1885 - 1973

EXECUTIVE OFFICERS

Foster, Wilbur Fisk	Principal Partner, 1885-1906
Creighton, Robert T.	President, 1906-1920
	Chairman of the Board, 1920-1926
Creighton, Wilbur F.	President, 1920-1958
Creighton, Wilbur F., Jr.	President, 1958-1973
	Chairman of the Board, 1973
Creighton, Wilbur F., III	President, 1973

OFFICERS ELECTED BEFORE WORLD WAR II

Brandon, Charles H.	1906-1909	Eatherly, Adrian D.	1921-1938
Crawford, R. L.	1920-1921	Foster, Chauncey C.	1906-1913
Creighton, Andrew D.	1920-1958	Gould, Harry M.	1908-1915
Currey, Washington	1917-1918	Haswell, William E.	1941-1972
Dudley, Robert M.	1906-1924	Scott, Charles L.	1913-1917
Dunbar, James S.	1920-1956	Sills, M. Floyd	1928-1958
Early, John	1906-1909	Warner, Edwin	1906-1934

OFFICERS ELECTED AFTER WORLD WAR II

Arrowood, Larry G.	1972	Heath, David S.	1968
Barnes, Joseph L., Jr.	1961	Holloway, John B.	1961-1971
Blakeman, Ralph N.	1968	Hutsell, Charles D.	1969
Bowers, William G.	1961	Krambeck, Paul A., Sr.	1974
Brown, Charles B.	1972	Markham, J. Willard	1961-1968
Carter, DeWitt	1949-1954	McLendon, E. P.	1972
Christian, Albert R.	1967	Porter, Samuel M.	1942-1967
Creighton, Robert T.	1943-1972	Price, Billy J.	1969
Dunbar, James S., III	1958-1973	Seagraves, William B.	1949-1962
Fite, Benjamin F.	1961-1973	Slaymaker, H. Roy	1961
Gaines, Ralph E.	1953-1955	Sowell, L. Elton	1973
Gambill, H. F.	1958-1970	Whitworth, Thurman H.	1968
Gwin, W. Richard	1973		

JOB SUPERVISORY PERSONNEL BEFORE WORLD WAR II
OFFICERS NOT INCLUDED

Alley, Charles	Malone, Bill
Barnes, Joseph L., Sr.	Martin, Bill
Bowers, A. Thomas	Martin, Jim
Bradley, Sam M.	Maynard, E. C.
Branscomb, W. W.	McCaul J.
Burnett, John	Pate, Elmer
Bush, DeWitt	Proctor, Robert L.
Creighton, Andrew D., Sr.	Pulley, C. E.

Creighton, Robert Dudley
Creighton, Robert W.
Criddle, Whitt
Dark, Dave
DePriest, Kyle
Douglas, George V., Sr.
Dunklin, Kleber B.
Ferguson, Edward
Ferguson, George W.
Ferguson, John
Fite, Glenn
Gabrey, Joe
Garland, H. H.
Gilbert, James G.
Harris, Laurel E.
Hyde, Henry
Johnson, Amos A.
Kimbrough, Robert J.
Lilly, C. V.
Rice, James W.
Roberts, Herb
Roberts, Wayne
Robertson, Cecil C.
Seagraves, J.
Spence, George M.
Spence, Walter S.
Sweeney, Tolly F.
Turbeville, Pete
Welch, William E.
White, Sid
Wilburn, G.
Wilson, Charles B.
Wright, Carson
Wright, Bill
Wright, Willard
Yates, Herman
Yates, Horace

JOB SUPERVISORY PERSONNEL AFTER WORLD WAR II
BUILDING DEPARTMENT OFFICERS NOT INCLUDED

Former Employees

Agee, Herbert
Babb, Curtis
Babb, Edward
Babb, Ralph
Babb, Robert
Ball, Felton
Barber, C. E.
Blanks, Hoyte
Bonds, Paul
Collins, Robert
Curtis, Frank
Douglas, George V., Jr.
Dudley, Robert Jr.
Flatt, Leamon
Harvey, Fred
Hester, James
Hines, Robert W.
Mays, N. Leslie
Price, William H.
Price, William I.
Roden, George S.
Rose, Dewey C.
Rowlett, C. E.
Shaddix, Leonard B.
Stripling, B. F.
Sweenie, Tolly
Tiesler, E. C.
Tomlinson, John S.
Tucker, John
White, James M.
Wilson, Fred D.
Wilson, Ray

1973 STAFF

	Date Employed		Date Employed
Burns, Phillip	1959	Fugate, John	1964
Colombo, Angelo C.	1939	Love, James S., Jr.	1950
Crutcher, Ronald	1969	McNees, Chester	1967
Davis, James R.	1960	Spence, George	1937
Dugger, James H.	1957	Wells, George Lenord	1957

JOB SUPERVISORY PERSONNEL AFTER WORLD WAR II
EQUIPMENT YARD, ROAD AND BRIDGE DEPARTMENT
OFFICERS NOT INCLUDED

Former Employees

Breeding, Robert D.
Burnette, John D.
Bynum, Coy J.
Candy, F. William
Chamness, Earle Jr.
Dudley, Bunyan S. Jr.
Ferebee, James
Gladden, William W.
Hay, Carson
Hensley, Fred
Hensley, Perry Sr.
Hines, Minor
Hutton, Albert
Johnson, Carl
Kahle, Leslie
Luckado, Robert E.
Maples, John
Markham, Jack D.
McAdoo, E. C.
Melton, Joe
Mitchell, Gilbert
Powers, Lowrey H. Jr.
Skidmore, Bill
Smartt, J. C.
Smith, Henry D.
Thompson, James C.
Ware, Claud A.
Wood, Frank
Young, Lenord
Young, William A.

1973 Staff

	Date Employed		Date Employed
Allison, Howard F.	1967	Merrimee, Leo D.	1961
Bass, Jimmy	1940	Phillips, James C. Jr.	1957
Brown, Pete H.	1967	Phillips, James T.	1962
Casto, Roy P.	1969	Pinion, Lonnie D.	1968
Coleman, Jim C.	1970	Sanders, F. Danny	1967
Collings, Jack C.	1972	Schaeffer, Bill	1968
Hay, John F.	1966	Smartt, Pete	1972
Hensley, Jerry R.	1958	Ward, Tom	1941
Hensley, Perry Jr.	1961	Wilkes. Bruce	1966
Jones, Johnny M.	1962		

ESTIMATORS, ENGINEERS AND OFFICE PERSONNEL BEFORE WORLD WAR II
OFFICERS NOT INCLUDED

Former Employees

Allen, Gabe E.
Comer, Christine Brooks
Detici, Joseph A.
Dunbar, Reuben B.
Easley, Paul F.
Fischer, Karl M.
Flannigan, Ward W.
Foster, M. Stratton
Gardner, James
Harris, C. D.
Harris, Roy
Hunter, J. Paul
Irvin, Frank
Johnson, James
Kendrick, J. C.
Kimbrough, Miller G.
Kinkead, Frances
Maxson, Jones
Meadow, George M.
Morris, James
Morrison, Robert C.
Neason, Mary
Sanders, Opal S.
Sullivan, Arch L.
Wilder, Gordon E.

ESTIMATORS AND OFFICE ENGINEERS AFTER WORLD WAR II
OFFICERS NOT INCLUDED

Former Employees

Anderson, John
Bowker, Billy Ray
Brock, Henry
Dewell, S. Eugene
Gardner, Carl A.
Harrison, Charles
Hicks, George T.
Lamastus, Ray
Maxson, Howard
Page, Scuyler, Jr.
Phifer, Charles
Robertson, Cecil C., Jr.
Spitaleri, Frank
Van Vorhees, Edward

1973 STAFF

	Date Employed		Date Employed	
Akers, Gorden	1973	Johnson, Donald W.	1972	
Bilby, J. Edward	1969	Lamb, Warren O.	1964	1942-1952
Brownlee, James H.	1972	Turner, Albert D.	1971	

OFFICE PERSONNEL AFTER WORLD WAR II
OFFICERS NOT INCLUDED

Former Employees

Anderson, Boyd Ralph
Barthes, Lamania
Burke, Elizabeth
Bloomenthal, Ray
Brock, Dorothy
Brothers, Jean
Crowder, Homer D.
Daniel, Margaret
Davenport, Robert W.
Dye, Betty
Eason, Nancy
Ethridge, Tommy
Fischer, Edith
Franklin, R. D.
Frazier, Mildred
Gambill, Mildred
Harned, Julie
Hinkle, Reba
Hulen, Sue
Hurt, Woodson
Jackson, Betty
Lipp, George
Mallory, Beth A.
Manners, Robert L.
McDonald, N. B.
Miller, Margarete
Morgan, Ray
Norman, Carolyn
Osborne, Juanita
Pace, Carolyn
Peddycord, Clay A.
Pride, H. Ward
Richardson, Billy
Roberts, William T., Jr.
Robinson, Charles
Schooge, Alice
Sellers, Peggy
Stephenson, Judith F.
Strong, D. A.
Treadwell, William B.
Trevino, Betty
Ulrey, Henry
Wall, Charles E.
Warren, M. R.

1973 Staff

	Date Employed
Allen, Vivian	1967
Blakeman, Eva	1961
Dean, Jo	1972
Callicoat, Dortha L.	1970
Carter, Gladys	1973
Clark, Thomas A., Jr.	1970
Dawson, Laurie	1946
Faulkner, Lucille	1972
Fort, Dorothy C.	1971
Harris, Rebecca	1942
Harris, Woodrow	1961
Hurt, Henry T.	1946
Lecomte, Betty	1973
Livesay, Frank	1973
Love, Charlene	1971
Miller, Roy	1954
Newton, Edna	1964
Owens, Vennie	1961
Pack, Brenda	1972
Pendergrass, Janet	1972
Pratt, Judy	1972
Perkins, Patricia A.	1969
Roadruck, Kathy	1973
Shilling, Carol M.	1973
Stephens, Bette	1970
Stringfellow, S. L.	1973
Van Arsdate, Brenda L.	1973
Wilkes, E. Ross	1972

VERSCO, INC.
PERSONNEL 1973
MAIN OFFICE

Blair, Frank III
Dedman, Jack P.
Duke, Peggy
Dunbar, James S. III
  Vice-President
  Assistant Sect. Treas.
Fite, Benjamin F.
  Vice-President
  General Superintendent
Goodrich, Scottie
Haswell, William E.
  Secretary Treasurer
Heath, David S.
  President
Lang, Gary
Patten, Thomas
Pettus, Ronald M.
Smotherman, Ralph
Varley, William P.

JOB SUPERINTENDENTS

Bell, Harold E.
Dokes, Martin
Haag, Edmund W.
Holliday, Arthur
Hunter, Homer
Miller, Irl J.
Miller, William L.
Schaeffer, John

JOB OFFICE PERSONNEL

Balthaser, Rhea I.
Campbell, Edward
Carter, Bettye
Dunbar, James S. IV
  Area Manager
Koehler, Beulah K.
Kveton, Vickie A.
Landers, Judith
Rhodes, Linda H.
Viking, Vivian
Williams, Helen

BUILDINGS AND INDUSTRIAL PLANTS
IN DAVIDSON COUNTY, TENNESSEE
COMPLETED BY FOSTER & CREIGHTON COMPANY SINCE 1885.

1894 - Tennessee State Penitentiary - Grading and Stone Masonry
Centennial Boulevard
Architect - Col. Wm. C. Smith

1896 - Parthenon - Foundation and Concrete Struct. Slabs.
Centennial Park
Architect - Col. Wm. C. Smith

Carnegie Library - Foundation and Retaining Walls
222 8th Avenue, North
Architect - Thompson, Gibel & Asmus

1897 Louisville and Nashville Railroad Co. Terminal
Grading and Retaining Walls
9th and Broadway
Engineer - Eugene C. Lewis
Architect - Richard Montfort
Builder - Charles A. Moses

1906 St. Thomas Hospital - Foundation
Church Street at 21st Avenue
Architect - Thompson, Gibel & Asmus

1908 Structural Steel for Hermitage Hotel
231 Sixth Avenue, North

1909 Y.M.C.A. - Concrete Work
Seventh & Union
Architect - Shattuck & Hussey

1910 Auditorium for Grand Lodge of Tennessee
306 Seventh Avenue, North
Architect - R. H. Hunt - Chattanooga

104' x 86' Concrete Kiln for Tenn. Oak Flooring Company
Southside Davidson Street at Fifth
Engineer - W. F. Creighton

1912 - Ford Garage (Now Hippodrome Olds)
1212 Broadway
Architect - Marr & Holman

Palmer Garage
Architect - Marr & Holman

Nashville Railway & Light Company - Paint Shop
428 Fourth Avenue, North
Engineer - Howard M. Jones

Ward Belmont Dormitory
Belmont Boulevard
Architect - Asmus & Clark

1915 - Belle Meade Country Club
Belle Meade Boulevard
Excavation, Foundations and Concrete
Prime Contractor - J. W. Patrick & Company
Architect - Edward Dougherty

1916 - Doctors' Office Building
Sixth Avenue
Architect - Marr & Holman

Ward Belmont Dormitory
Belmont Boulevard
Architect - John Keevan Peebles - Norfolk, Va.

Buford College Dormitory
Architect - Asmus & Clark

Fourth & First National Bank (Now First American National Bank)
4th & Union
Architect - Ludlow & Peabody - New York, N. Y. and Henry C. Hibbs

1917 - Page Garage
Fifth Avenue and Commerce
Owner

Bransford Garage
Architect - Marr & Holman

Bond Warehouse (Bond-Chadwell Company)
Broadway at 16th Avenue
Architect - Marr & Holman

1919 - Peabody College Library
Peabody Campus
Architect - E. L. Tilton

1920 - Victor Chemical Works Plant (Now Stauffer Chemical Company)
Centennial Boulevard
Owner

1921 - Buford Brothers Building
Second Avenue, North
Architect - Marr & Holman

Union Stock Yards
723 Cowan Street
Architect - H. C. Hibbs

Lebeck Brothers Store (Now Harveys Department Store)
Church Street between Fifth and Sixth Avenue
Architect: Asmus & Clark

State Highway Garage
Charlotte & 22nd Avenue, North
Tennessee State Highway Dept. Engineers

1918 - Cheek Garage (Now Cumberland Dodge)
16th & Broadway
Architects - Russell E. Hart and George Nevins

East End Methodist Church Addition
1212 Holly Street
Owner

Fourth & First National Bank Addition
4th & Union
Architect - H. C. Hibbs

1922 - River & Rail Terminal (Now Ozburn-Hessey Company)
First & Broadway
Architect - Hart, Freeland & Roberts

Neuhoff Packing Company Engine Room
Cowan Street
Architect - Henschien & McLaren

1922 - Fourth & First National Bank Branch
Third & Broadway
Architect - D. W. Southgate

Federal Reserve Bank
226 Third Avenue, North
Architects - Marr & Holman and
Teneck Brown - Atlanta

Neuhoff Sausage Plant
Cowan Street
Architect - Henschien & McLaren

Dwight Webb Residence
Ensworth Avenue
Architect - H. C. Hibbs

1923 - McQuiddy Printing Company Building
110 Seventh Avenue, North
Architect - H. C. Hibbs

Neely Memorial Hall
Vanderbilt Campus
Architect - H. C. Hibbs

National Life & Accident Insurance Company
7th & Union
Architect - George C. Norton

Nashville Railway & Light Company
Sixth & Church Street
Architect - Marr & Holman

Ward Belmont Gymnasium (Now Belmont College)
Belmont Boulevard
Architect - Asmus & Clark

Protestant Hospital (Now Baptist Hospital
2000 Church Street
Architect - Warfield & Keeble

1924 - Caldwell Building (Now Commerce Union Bank)
400 Union Street
Architect - Marr & Holman

1924 - Swift & Company - Poultry Plant
800 Fourth Avenue, North
Owner

Memorial Apartment Hotel.
Seventh & Charlotte
Architect - Asmus & Clark

1925 - Alumni Memorial Hall
Vanderbilt Campus
Architect - H. C. Hibbs

Washington Hosiery Mill
Charlotte at 38th
Architect - Marr & Holman

National Life Residence and Tower (Now W.S.M.)
1200 Villa Place
Engineer - Jack DeWitt
Architect - George C. Norton

1926 - Printing School Building
16th & South Street
Architect - Hart, Freeland & Roberts

Graybar Electric Company Building
8th Avenue at Lafayette
Architect - Chas. H. McCauley - Birmingham

Nashville Trust Company Building (Now Nashville City Bank & Trust Co.)
315 Union Street
Architect - Asmus & Clark

Bennie Dillon Building
Church Street at Seventh
Architect - Asmus & Clark

Life & Casualty Insurance Building (Now W.L.A.C.)
Fourth & Church
Architect - Russell E. Hart

Nashville Pump Station, Boiler House
Pumping Sta. Road
Engineer - J. N. Chester Engineers
Pittsburgh, Pennsylvania

1926 - I.O.O.F. Medical Arts Building (Now Genesco)
111 Seventh Avenue, North
Architect - Alsop & Callahan

Mausoleum - Mt. Olivet Cemetery

Owner

1927 - Davidson County Garage
South Fifth Street
Architect - Asmus & Clark

Rogers Caldwell Residence (Now Ellington Agricultural Center)
Elysian Fields Road
Architects - Marr & Holman and
Jerry Holmes of Thompson, Holmes and Converse - N.Y., N.Y.

City Hospital Boiler House
Hermitage Avenue
Architect - Asmus & Clark

St. Thomas Hospital - Addition
Church Street between 20th and 21st
Architect - Asmus & Clark

Junior High School
19th between Charlotte and Jo Johnson
Architect - McKissack & McKissack

1928 - Victor Chemical Company - Office Building (Now Stauffer Chemical Co.)
Centennial Boulevard
Owner

Park Avenue Junior High School
Park Avenue & 45th Street
Architect - Asmus & Clark

War Memorial Gardens
Capitol Boulevard
Architect - Edw. Dougherty & McKim, Mead & White - New York, N. Y.

1929 - Will Cheek Residence

Architect - Hart, Freeland & Roberts

1929 - Guilford Dudley Residence (Now Paul Mountcastle Residence)
Hillsboro Road at Stanford Drive
Architect - Dougherty & Gardner

Parthenon Restoration
Centennial Park
Architect - Hart, Freeland & Roberts

Seventh Avenue Garage
Seventh Avenue between Commerce & Church
Architect - Marr & Holman

Stumb Garage
11th & Broad
Architect - Warfield & Keeble

St. Mary's Parish House
White Bridge Road
Architect - Asmus & Clark

T. B. Hospital
Hamilton Road (Bordeaux)
Architect - Asmus & Clark

1930 - C. R. Clements' Residence
Bellemeade
Architect - Nevins & Dalrymple

Tom Kennedy Residence
Woodlawn Avenue
Architect - Hart & Stone

Tom Tyne Residence
Hillsboro Road & Tyne Boulevard
Architect - Bryant Fleming

Nashville Filtration Plant
Pumping Station Road
Owner

McQuiddy Printing Company Building
110 7th Avenue, North
Architect - Carlton Brush

1930 - Fort Nashborough Replica
First Avenue between Broad & Church Street
Architect - Hart & Stone

Jarman Shoe Company Plant (Now Genesco)
Main Street between 7th & 9th
Architect - C. K. Colley

Montgomery-Ward Building(Now Security Federal Savings & Loan Assoc. of Nashville)
500 Union Street
Architect - Marr & Holman

Nashville Pure Milk Company
Church Street & 14th
Architect - Asmus & Clark

National Life & Accident Insurance Company - Addition
7th & Union
Architect - George C. Norton

Loveman, Berger & Teitlebaum-Remodeling
Fifth & Union
Architect - Joe Hart

McNeilly Day Home
400 Meridian Street
Architect - Geo. D. Waller

1931 - American National Bank - Remodeling
Fourth & Union
Architect - D. W. Southgate

Central State Hospital
Ezell Pike
Architect - Marr & Holman

General Hospital Nurse's Dormitory
Hermitage Avenue
Architect - Asmus & Clark

Victor Chemical Works (Laboratory Building) (Now Stauffer Chemical Company)
Centennial Boulevard
Owner

1931 - Ray Hare Residence
Franklin Road
Architect - J. H. Parmelee

Warner Building and Theater
Church Street and 6th Avenue
Excavation
Architect - Marr & Holman

Tennessee Building & Loan Association

Architect - Hart, Freeland & Roberts

J. H. Lawson Residence

Architect - Warfield & Keeble

R. E. Martin Residence
Hillsboro Road South of Tyne Boulevard
Architect - Warfield & Keeble

Dempsey Weaver Residence(Now Colemere Club)
Murfreesboro Rd. at Airport
Architect - Hart, Freeland & Roberts

Hanover Shoe Store
Church Street
Architect - C. K. Colley

Hermitage Club - Remodeling
Seventh Avenue at Union
Architect - Marr & Holman

1932 - Davitt's Store - Remodeling
238 Sixth Avenue, North
Architect - Emmons H. Woolwine

Sam Small Jewelry Store - Remodeling
Church Street between 6th & Capitol Blvd.
Architect - Asmus & Clark

Morris Store-Remodeling
Church Street between 7th & 6th
Architect - E. H. Woolwine

John B. Ransom School
3501 Byron Avenue
Architect - Warfield & Keeble

Cumberland River Sand Company - Office Building (Now Ingram Materials,Inc.)
10 Fatherland Street
Owner

1932 - Centennial Park Swimming Pool

Architect - Warfield & Keeble

Tarbox School-Rebuilt after Fire
Broad Street between 17th & 18th
Architect - H. C. Hibbs

1933 - Eastwood Christian Church
Eastland Avenue at 16th
Architect - Hart, Freeland & Roberts

U. S. Post Office-Concrete Work
901 Broadway
Architect - Marr & Holman
Prime Contractor - Frank Messer & Sons
Cincinnati, Ohio

1934 - First Baptist Church - Restoration
Broad & 7th Avenue
Architect - Hart, Freeland & Roberts

Knowles Memorial Homes for The Aged No. 1
Ridley Boulevard
Architect - D. W. Southgate

Knowles Memorial Homes for the Aged No. 2
1501 23rd Avenue, North
Architect - E. S. Woolwine

Monroe Harding Children's Home
1112 Glendale Lane
Architect - H. C. Hibbs

1935 - Firehall No. 13
Charlotte Avenue
Architect - H. C. Hibbs

Highland Heights Jr. High School
Between North First Street and Meridan Street
Architect - E. H. Woolwine

S. H. Kress Store
5th Avenue, North
Owner

1936 - Waverly-Belmont Junior High School
2301 10th Avenue, South
Architect - Marr & Holman

U. S. Customs House
Remodeling
8th & Broad
Architect - Owner

1936 - General Shoe Company - Plant Addition (Now Genesco)
Shelby Street between Seventh & Ninth
Architect - Dougherty & Clemons

Gray & Dudley Plant
Clifton Road
Owner

City Market House (Now Metropolitan Safety Building)
Public Square
Architect - H. C. Hibbs

Vanderbilt University Hospital
First West Wing Addition
Vanderbilt Campus
Architect - H. C. Hibbs

Hitchcock Building - Remodeling (Now Harveys Department Store)
Seventh & Church Street
Architect - Marr & Holman

Cheatham Place Housing Project
8th Avenue, North & Clay
Architect - Associated Architects

Cathedral of The Incarnation - Boiler Room
21st & West End
Architect - Asmus & Clark

1937 - Grant's Store - Rebuilt after Fire
Fifth Avenue between Church & Union
Architect - Marr & Holman

Tennessee Products Corp. Plant
Centennial Boulevard
Owner

U. S. Tobacco Company - Plant Addition
10th & Harrison Street
Owner

1938 - Federal Weighing Station
Goodlettsville, Tennessee
Tennessee Department of Highways

1939 - Howard School (Now Metropolitan Building)
Second Avenue, South
Architect - Hart, Freeland & Roberts

1940 - Baptist Sunday School Board Office Building
Ninth Avenue, North
Architect - Hart, Freeland & Roberts

McTyeire Hall
Vanderbilt Campus
Architect - Warfield & Keeble

Joint University Libraries (Original Building)
Vanderbilt Campus
Architect - H. C. Hibbs

1943 - Army Air Classification Center
Thompson Lane (Now Sidco)
U. S. Army Corps of Engineers

1946 - Goodyear Tire Plant - Defense Plant Corp.
Bordeaux
Terminated After W.W.II
Architect - J. Gordon Turnbull, Inc.

1947 - Vanderbilt University Dormitories & Housing
McGill Hall and Tolman Hall
Vanderbilt Campus
Architect - Francis B. Warfield & Associates

National Stores, Inc. Building
Third Avenue, North
Architect - Donald W. Southgate

Joe Morse Store
Church Street
Architect - Marr & Holman

Ferro Corporation Plant
Culvert Street
Owner

First American National Bank - Remodeling
4th & Union
Architect - Howard, Hickerson & Jordan, Inc.

Baker Shoe Store
619 Church Street
Owner

1948 - Levy's Store
212 Sixth Avenue, North
Architect - Donald W. Southgate

State of Tennessee Prison Boiler Plant
Centennial Boulevard
Architect - Hart, Freeland & Roberts

1949 - Cole Hall Women's Dormitory
Vanderbilt Campus
Architect - Francis B. Warfield & Associates

Tennessee Agricultural & Industrial State University
Library Building
Centennial Blvd.
Architect - McKissack & McKissack

St. Thomas Hospital Nurse's Home
2000 Hayes Street
Architect - Maguolo and Quick - St. Louis, Missouri

1950 - Tenn. A & I Engineering Building (Now Tenn. State University)
Centennial Boulevard
Architect - McKissack & McKissack

West End Synagogue
3814 West End Avenue
Architect - Hart, Freeland & Roberts

Eastwood Christian Church Addition
1601 Eastland Avenue
Architect - Marr & Holman

1951 - Super Service Motor Freight Lines Terminal
Fessler's Lane
Architect - Brush, Hutchison & Gwinn

Southern Bell Telephone Company Building
8th Avenue at Church Street
Architect - Hart, Freeland & Roberts

Jewish Community Center Building
3500 West End Avenue
Architect - Hart, Freeland & Roberts

1952 - Nashville Electric Service Center
13th & Church Street
Architect - H. Clinton Parrent, Jr.

1952 - Crescent Amusement Company Movie Theatre
Church Street at Sixth Avenue
Architect - Marr & Holman

Vanderbilt University Memorial Gymnasium (Original Building)
25th Avenue at Vanderbilt Place
Architect - Edwin A. Keeble

1953 - State of Tennessee T.B. Hospital
Ben Allen Road
Architect - Marr & Holman

John Henry Hale Housing Project
13th & Charlotte
Architect - Woolwine, Harwood & Clark

Cordell Hull State Office Building
Charlotte between Gay St. & 5th
Architect - Hart & McBryde

1954 - Western Electric Company Distribution Plant
195 Polk Avenue
Lockwood Greene Engineers

Southern Bell Tel. & Tel. Company
Second and Church Street
Architect - Warren, Knight & Davis - Birmingham, Alabama

WLAC T.V. Studio
Fourth & Church Street
Owner

Medical Arts Building - Remodeling (Now Genesco)
111 Seventh Avenue, North
Architect - Alsop and Callahan

1955 - Disciples of Christ
Thomas W. Phillips Memorial Library
19th Avenue, South
Architects - Hart, Freeland & Roberts and
Hoffman and Crumpton - Pittsburgh, Pa.

1955 - Sears Roebuck & Company Store
639 Lafayette
Architect - Stevens & Wilkinson - Atlanta, Ga.

WSIX Tower Foundations
Old Hickory Boulevard
Engineer - Owner

1956 - Cain-Sloan Company Department Store
Fifth & Church Street
Architect - Marr & Holman

Neuhoff Packing Plant Addition
723 Cowan Street
Owner

Utilities and Buildings at Old Hickory Dam

U. S. Army Corps of Engineers

Kissam Quadrangle Dormitories
21st and West End Avenue
Architects - Francis B. Warfield & Associates
Edward D. Stone - New York, N.Y.

Truck Terminal Addition
Super Service Motor Freight Company, Inc.
Fessler's Lane
Architect - Brush, Hutchison & Gwinn

Ferro Corporation Plant Additions
Culvert Street
Owner

1957 - Vanderbilt Athletic Office
26th Avenue, South
Architect - Brush, Hutchison & Gwinn

Marquette Cement Mfg. Company
Plant Addition
Lower Island
Engineer - Klug and Smith Co.
Milwaukee, Wisconsin

Nashville Machine & Supply Company Office
100 Woodycrest Avenue
Architect - Hart, Freeland & Roberts

1958 - Southern Bell Tel & Tel. Company
Cable Vault Dial Office
Madison, Tennessee
Architect - Saggus, Williamson, Vaught & Spiker - Atlanta, Ga.

1958 - A & I Student Union Building (Now Tennessee State University)
Centennial Boulevard
Architect - McKissack & McKisaick

A & I Martha Brown Memorial Library (Now Tennessee State University)
Centennial Boulevard
Architect - McKissack & McKissack

Fisk University Dormitory (DuBois)
Fisk Campus
Architect - Ayres & Godwin - Atlanta, Ga.

1959 - Fisk University Student Union Building
Fisk Campus
Architect - Ayres & Godwin - Atlanta, Ga.

Castners Department Store
Remodeling
Seventh and Church
Architect - Marr & Holman

1961 - Bottling Plant
Beaman Bottling Company
715 Thompson Lane
Architect - John Charles Wheeler

Foster & Creighton Company
Office Building
Thompson Lane and Foster Creighton Dr.
Equipment Yard and Shop
Architect - Howard, Nielsen, Lyne Batey & O'Brien

Capitol Park Inn Motel
400 Fifth Avenue, North
Architect - Taylor and Crabtree

A B. Learned Laboratory Building
Vanderbilt Campus
Architect - John A. Preston & Associates

1962 - Shoe Manufacturing Plant
Johnston & Murphy Shoe Company
Genesco Corporation
McGavock Lane
Architect - John Charles Wheeler

Vanderbilt Hospital - West Wing Addition
Vanderbilt Campus
Architect - John A. Preston & Associates

Distribution House Extension
Western Electric Company
195 Polk Avenue
Lockwood Greene Engineers, Inc. - New York, N.Y.

1963 - Distribution Terminal
Genesco Corporation
McGavock Lane
Architect - John Charles Wheeler

Lewis House and Morgan House
Married Student Apartments
Vanderbilt University
25th Avenue South and Pierce
Architect - Brush, Hutchison & Gwin

1964 - West Court Addition
Vanderbilt Hospital
Vanderbilt Campus
Architect - John A. Preston & Associates

1965 - Cain-Sloan Company Department Store
Green Hills
Architect - Miller, Patton & Associates

Vanderbilt Memorial Gymnasium
North Balconies
25th Avenue, South at Vanderbilt Place
Architect - Edwin A. Keeble & Associates

1966 - Administration Building
Genesco, Inc.
Murfreesboro Road
Architect - John Charles Wheeler

Cement Storage Facilities and Dock
Dundee Cement Company
Visco Drive
Architect - Holderbank Technical Services Ltd.
Clarkson, Ontario, Canada

1968 - Baptist Hospital
Church Street at 21st Avenue, North
Architect - Hart, Freeland & Roberts

Kingsbury Mills Textile Plant
Genesco, Inc.
McGavock Lane
Architect - Robert & Company - Atlanta, Ga.

1968 - McNeilly Day Home
400 Meridian Street
Architect - Randall Yearwood

Ferro Corporation Plant Addition
Culvert Street
Owner

Ford Motor Company
Nashville Glass Plant
Centennial Boulevard
Plant Addition
Architect - Owner

Gates Tire Center
Airco, Inc.
3741 Nolensville Road
Architect - Richard John Frank
Denver, Colorado

1969 - South Central Bell Telephone Company
Sharondale Dial Office Building
Sharondale Drive
Architect - Warren, Knight & Davis - Birmingham, Alabama

Western Electric Company Plant Addition
195 Polk Avenue
Owner

Ford Motor Company
Nashville Glass Plant
Centennial Boulevard
Power House Building Addition
Architect - Edwin A. Keeble & Associates

Vanderbilt Memorial Gymnasium
South and West Balconies
25th Avenue, South & Vanderbilt Place
Architect - Edwin Keeble & Associates

Peterbilt Motors Company Office Building
430 Myatt Drive
Architect-Engineer - Bechtel Corp. - New York, New York

1970 - Cain-Sloan Company Garage Alterations
Fifth & Church Street
Architect - Sverdrup & Parcel and Associates

1971 - First American National Bank and Office Building
Fourth & Union
Architect - John Charles Wheeler & Associates, Inc.
Perkins & Will - Chicago, Illinois

1972 - Central Chilling & Heating Plant with solid waste Incineration for
Nashville Thermal Transfer Corporation
First Avenue, South at Demonbreun Street
Architect - I. C. Thomasson & Associates, Inc.

1973 Computer Room Addition
Ford Motor Company
Nashville Glass Plant
Nashville, Tennessee

VERSCO, INC.
HOSPITAL CONTRACTS

1971 Coffee General Hospital
Enterprise, Alabama
Owner, Extendicare, Inc. - Louisville, Kentucky
Architect, Earl Swensson, Architect

1972 Community Hospital
Kissimmee, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Fort Walton Beach General Hospital
Fort Walton Beach, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Lucerne General Hospital
Orlando, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Community General Hospital
Dade City, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Bennett Community Hospital
Fort Lauderdale, Florida
Owner, Extendicare, Inc.
Architect, Watson & Gerberich
Miami, Florida

1972 Greater Orange Park Community Hospital
Orange Park, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Women's Memorial Hospital of Tampa
Tampa, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Jefferson County General Hospital
Louisville, Georgia
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1972 Daytona Beach Community Hospital
Daytona Beach, Florida
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

VERSCO, INC.
HOSPITAL CONTRACTS
-2-

1972 St. Luke's Hospital
Richmond, Virginia
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

1973 Nautilus Hospital
Waverly, Tennessee
Owner, Extendicare, Inc.
Architect, Earl Swensson, Architect

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